



Town of Chino Valley

MEETING NOTICE TOWN COUNCIL

REGULAR MEETING
Tuesday, August 9, 2016
6:00 P.M.

Council Chambers
202 N. State Route 89
Chino Valley, Arizona

A majority of the Councilmembers may attend a private invocation in the Council Conference Room immediately prior to the Council meeting. No Town business will be discussed.

AGENDA

1. **CALL TO ORDER, PLEDGE OF ALLEGIANCE; ROLL CALL**
2. **INTRODUCTIONS, PRESENTATIONS, AND PROCLAMATIONS**

- a. Proclamation declaring August 21-27, 2016 as “Employer Support of the Guard and Reserve Week,” sponsored by the Arizona Employer Support of the Guard and Reserve.

3. **CALL TO THE PUBLIC**

Call to the Public is an opportunity for the public to address the Council on any issue within the jurisdiction of the Council that is not on the agenda. Public comment is encouraged. Individuals are limited to speak for three (3) minutes. The total time for Call to the Public may be up to 30 minutes per meeting. Council action taken as a result of public comment will be limited to directing staff to study the matter, scheduling the matter for further consideration and decision at a later date, or responding to criticism.

4. **RESPONSE TO THE PUBLIC**

Response to the Public is an opportunity for the Mayor to inform the public about how Town officials addressed matters raised during Call to the Public at a previous meeting.

- a. Comments regarding trash in Town.
- b. Comments regarding political signs disappearing.
- c. Suggestion to provide transportation for voters on election day.
- d. Question regarding benefits to medical marijuana farms in Chino Valley.

5. CURRENT EVENT SUMMARIES AND REPORTS

This item is for information only. The Mayor, any Councilmember, or Town Manager may present a brief summary or report of current events, or ask a staff member to provide the same. Presentation on information requested by the Mayor and Council will be made and questions answered. No action will be taken.

- a. Status reports by Mayor and Council regarding current events.
- b. Status report by Town Manager Robert Smith regarding Town accomplishments, and current or upcoming projects.

6. CONSENT AGENDA

All those items listed below are considered to be routine and may be enacted by one motion. Any Councilmember may request to remove an item from the Consent Agenda to be considered and discussed separately.

- a. Consideration and possible action to approve contract between the Town of Chino Valley and Kubota Membrane USA Corporation for purchase of Kubota membrane cartridge filters type 510 and accessory equipment for the Chino Valley wastewater treatment facility in the amount of \$308,840.00. (Chris Bartels, Utility Supervisor)

7. ACTION ITEMS

The Council may vote to recess the public meeting and hold an Executive Session on any item on this agenda pursuant to A.R.S. § 38-431.03(A)(3) for the purpose of discussion or consultation for legal advice with the Town Attorney. Executive sessions are not open to the public and no action may be taken in executive session.

- a. Consideration and possible action to approve Resolution No. 16-1089 approving a guaranteed energy cost savings program and agreements with Climatec, LLC for purchase and installation of improvements to Town facilities for the purpose of reducing energy costs and to measure and verify the savings after the installation is complete. (Phyllis Smiley, Town Attorney)

Recommended Action: Approve Resolution No. 16-1089, to approve a guaranteed energy cost saving program and the following agreements with Climatec LLC:

- (i) Installation Agreement in the amount of \$606,135.00, and
- (ii) Measurement and Verification Agreement in the amount of \$4500 per year for the first 3 years and escalating 4% annually for every subsequent year thereafter for a term of 15 years.

- b.** Consideration and possible action to approve the First Amendment to Accountability Contract and Scope of Services, between the Town of Chino Valley and the Chino Valley Area Chamber of Commerce for FY 16/17 in an amount of Thirty-Eight Thousand (\$38,000.00) dollars. (Cecilia Grittmann, Assistant Town Manager)

Recommended Action: Approve the First Amendment to Accountability Contract and Scope of Services between the Town of Chino Valley and the Chino Valley Area Chamber of Commerce for FY 16/17 in the amount of Thirty-Eight Thousand (\$38,000.00) dollars.

- c.** Consideration and possible action to approve Financial Report for the twelve months ending June 30, 2016. (Joe Duffy, Finance Director)

Recommended Action: Approve Financial Report for the twelve months ending June 30, 2016.

- d.** Consideration and possible action to approve recommended budget adjustments for the Fiscal Year Ending June 30, 2016. (Joe Duffy, Finance Director)

Recommended Action: Approve recommended budget adjustments for Fiscal Year Ending June 30, 2016.

8. EXECUTIVE SESSION

Council may vote to recess the Regular Meeting and hold an executive session, which will not be open to the public, for the following purposes.

9. ACTION ITEMS RESUMED

After the Executive Session, Council will reconvene the Regular Meeting.

10. ADJOURNMENT

Dated this 4th day of August, 2016.

By: **Jami C. Lewis, Town Clerk**

The Town of Chino Valley endeavors to make all public meetings accessible to persons with disabilities. Please call 636-2646 (voice) or 711 (Telecommunications Arizona Relay Service) 48 hours prior to the meeting to request a reasonable accommodation to participate in this meeting.

Supporting documentation and staff reports furnished to the Council with this agenda are available for review on the Town website at <http://www.chinoaz.net/agendacenter> and in the Public Library and Town Clerk's Office.

CERTIFICATION OF POSTING

The undersigned hereby certifies that a copy of this notice was duly posted at Chino Valley South Campus, Chino Valley Post Office, and Chino Valley North Campus in accordance with the statement filed by the Town Council with the Town Clerk.

Date: _____ Time: _____ By: _____
Jami C. Lewis, Town Clerk



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 2. a.

Meeting Date: 08/09/2016
Contact Person: Jami Lewis, Town Clerk
 Phone: 928-636-2646 x-1208
Department: Council
Estimated length of Staff Presentation:
Physical location of item: N/A

AGENDA ITEM TITLE:

Proclamation declaring August 21-27, 2016 as “Employer Support of the Guard and Reserve Week,” sponsored by the Arizona Employer Support of the Guard and Reserve.

SITUATION & ANALYSIS:

ESGR, a Department of Defense agency, was established in 1972 to promote cooperation and understanding between Reserve Component Service members and their civilian employers and to assist in the resolution of conflicts arising from an employee's military commitment. ESGR is supported by a network of more than 4,900 volunteers in 54 committees located across all 50 states, the District of Columbia, Guam-CNMI, Puerto Rico and the U.S. Virgin Islands. Volunteers, hailing from small business and industry, government, education and prior military service bring a vast wealth of experience to assist in serving employers, service members and their families. Together with Headquarters ESGR staff and a small cadre of support staff for each State Committee, volunteers work to promote and enhance employer support for military service in the Guard and Reserve.

ESGR has served our country for more than 40 years, fostering a culture in which all employers support and value the employment and military service of members of the National Guard and Reserve in the United States. These citizen warriors could not defend and protect us at home and abroad without the continued promise of meaningful civilian employment for themselves and their families. ESGR has continued to adapt to meet the needs of Reserve Component members, their families and America's employers by joining forces with a network.

During the week of August 21-27, 2016 the Top 15 employers from across the country will be nationally recognized by the Secretary of Defense. We would like to declare this week as Employer Support of the Guard and Reserve Week in support of these outstanding employers.

Attachments

Proclamation - Employer Support of the Guard & Reserve Week



PROCLAMATION

Employer Support of the Guard and Reserve Week August 21-27, 2016



Whereas, National Guard and Reserve forces comprise nearly half of our nation's military strength and are essential to America's national security. Reserve Component forces stand ready to answer the call to serve, whether serving alongside active duty counterparts all across the globe or responding to humanitarian crises at home and abroad; and

Whereas, employers provide critical support to members of the National Guard and Reserve; allowing Citizen Warriors to serve whenever the Nation calls, often foregoing financial gain and making sacrifices in the process; and

Whereas, employer support is stronger than ever, more than 42 years after President Richard Nixon authorized the Secretary of Defense to establish the National Committee for Employer Support of the Guard and Reserve (ESGR); and

Whereas, our nation is in debt to the Citizen Warriors departing the comforts of home to ensure our freedoms remain intact. Likewise, America pays special tribute to the commitment of dedicated and supportive employers who continue to make service in the Reserve Components possible; and

Now, Therefore, I, Chris Marley, Mayor of the Town of Chino Valley, do hereby proclaim August 21-27, 2016 as National Employer Support of the Guard and Reserve Week in Chino Valley, Arizona and urge all of our citizens to recognize this observances.

In Witness Whereof, I have hereunto set my hand and caused the Seal of the Town of Chino Valley to be affixed this 9th day of August, 2016.

Chris Marley, Mayor

ATTEST:

Jami C. Lewis, Town Clerk



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 6. a.

Meeting Date: 08/09/2016
Contact Person: Chris Bartels, Utility Supervisor
 Phone: 928-636-2646 x-1233
Department: Public Works
Item Type: Consent
Estimated length of staff presentation: None
Physical location of item: 2190 Rodeo Drive, Chino Valley AZ 86323

AGENDA ITEM TITLE:

Consideration and possible action to approve contract between the Town of Chino Valley and Kubota Membrane USA Corporation for purchase of Kubota membrane cartridge filters type 510 and accessory equipment for the Chino Valley wastewater treatment facility in the amount of \$308,840.00.

RECOMMENDED ACTION:

Approve contract between the Town of Chino Valley and Kubota Membrane USA Corporation for the Purchase of Kubota membrane cartridge filters type 510 and accessory equipment for the Chino Valley wastewater treatment facility in the amount of \$308,840.00.

SITUATION AND ANALYSIS:

Issue Statement

Applicable "Policy"

Satisfaction of "Policy"

Summary of Issues and Staff Rationale

Findings of Fact

Fiscal Impact

Fiscal Impact?: yes
If Yes, Budget Code: 06-83-5422
Available: \$350,000
Funding Source:
 Capital Improvement Expenditures

Attachments

Kubota Purchase Contract

Kubota Bid

PURCHASE CONTRACT

Vendor: Kubota Membrane USA Corporation

Vendor Address: 11807 North Creek Parkway S., Suite B-109 Bothell, WA 98011

This Contract is entered into between the Town of Chino Valley, Arizona ("Chino Valley") and Kubota Membrane USA Corporation ("Vendor") this 9th day of August, 2016.

1. Agreement to Purchase: Chino Valley agrees to purchase and Vendor agrees to sell, pursuant to the terms and conditions set forth herein, the supplies described in Exhibit A ("Purchased Items") in accordance with all requirements of the General Conditions, Specifications and Design Standards and Vendor's bid. The General Conditions, Purchased Items Specifications and Design Standards and Vendor's bid are incorporated into this Contract as though fully set forth herein.
2. Risk of Loss: Vendor shall bear all risks of loss, injury or destruction of goods and materials contracted for hereunder which occur prior to delivery of the Purchased Items to Chino Valley. Any such loss, injury, or destruction prior to delivery shall not release Vendor from any obligation owed hereunder.
3. Delivered Service Ready: The Purchased Items shall be delivered ready to be put into intended service.
4. Delivery Acceptance: The Purchased Items shall be delivered to Customer on or before November 10th, 2016. Prior to acceptance of the Purchased Items and payment of the invoice, Customer shall inspect the Purchased Items to confirm compliance with the requested Purchased Items specifications. The inspection may include testing where the nature of the Purchased Items cannot be adequately determined otherwise. The cost of testing shall be borne by Chino Valley, except where the goods are nonconforming. In such case, Chino Valley may recover the reasonable cost of inspection and testing from Vendor as part of its incidental damage caused by Vendor's breach.
5. Patent and Royalty Rights: Vendor agrees to defend Chino Valley at Vendor's own expense, in all suits, actions or proceedings in which Chino Valley is made a defendant for actual or alleged infringement of any United States of America or foreign patent resulting from Customer's use of the goods purchased from the Vendor. Vendor further agrees to pay and discharge any and all judgments or decrees that may be rendered in any such suit, action or proceedings against the Vendor. Vendor agrees to indemnify and hold harmless Customer from any and all royalty and proprietary licenses, fees or costs, including legal costs, which may arise out of Customer's purchase and use of Purchased Items supplied by Vendor. It is expressly agreed by Vendor that these patent and royalty covenants are irrevocable and perpetual.
6. Applicable Law: This Contract shall be governed by the laws of the State of Arizona without regard to any choice of law provisions thereof.

7. Compliance with Laws:

(a) Vendor represents that all goods and services, delivered pursuant to the Contract will be produced and supplied in compliance with all applicable state and federal laws and regulations, including the requirements of the Fair Labor Standards Act of 1938, as amended.

(b) Vendor shall be responsible for compliance with any federal, state and local laws and regulations applicable to its installation of the Purchased Items furnished hereunder, and will obtain any permits required for such installation.

8. Assignment: This Contract may not be assigned by Vendor without the prior written consent of Chino Valley, and any assignment without such consent shall be null and void.

9. Attorneys' Fees: If any action at or in equity is necessary to enforce the terms of this Contract, the prevailing party shall be entitled to reasonable attorney, accountant and other professional fees, costs and expenses in addition to any other relief to which such prevailing party may be entitled.

10. Termination for failure to Budget: If funds for this Contract are not appropriated or budgeted by July 1, 2016, Chino Valley may terminate this contract by giving written notice to Vendor.

11. Entire Agreement: This Agreement (which includes the General Conditions, Purchased Items Specifications and Design Standards and Vendor's bid) constitutes the entire agreement between the parties, and any oral representations or terms set forth in a separate acceptance form or delivery slip shall not alter the terms and conditions of this Agreement.

Dated the year and date set forth above.

TOWN OF CHINO VALLEY

VENDOR

Kubota Membrane USA Corporation

Chris Marley, Mayor

By

Its: _____

Authorized Representative

ATTEST:

Jami Lewis, Town Clerk

APPROVED AS TO FORM:

Phyllis L.N. Smiley, Town Attorney

For Earth, For Life



ORIGINAL

Bid Proposal for

Replacement Membrane Cartridge Filters for the Town of Chino Valley



Membrane Bioreactor System

Submitted To:

Town of Chino Valley Public Works Office
1982 Voss Drive
Chino Valley, Arizona 86323

Prepared by:

Kubota Membrane USA Corporation
11807 North Creek Parkway S., Suite B-109
Bothell, WA 98011
425-898-2858

Local Representation By:

Goble Sampson Associates

Josh Ziembiec

480-271-0519

jziembiec@goblesampson.com



July 22, 2016

For Earth, For Life



Chris Bartels, Public Works Manager
Town of Chino Valley
1982 Voss Drive
Chino Valley, AZ 86323

Dear Mr. Chris Bartels:

We are pleased to present the attached materials for consideration regarding the replacement membrane cartridge filters project at the Kubota MBR Wastewater Treatment Facility for Chino Valley, AZ. Kubota Membrane USA is a company with a strong history in the U.S., backed by Kubota Corporation's extensive wastewater experience worldwide.

A compelling feature of the Kubota MBR System is the simplicity of daily operations and periodical maintenance. Both the membrane unit itself and the MBR system are designed for the operator's convenience. Kubota will provide the specified supplies and will support the Chino Valley WWTF for the lifetime of the treatment facility.

Kubota Membrane USA offers first class service. Our technicians are well trained in wastewater analysis and membrane inspection based on operational experience. This sets us apart from other membrane manufacturers who do not design, build, or operate treatment plants, and system integrators who do not manufacture parts or operate plants. We are responsive to operator concerns and knowledgeable about the Kubota MBR System from top to bottom.

With the Kubota name comes a long history of excellence in MBR wastewater treatment. We are happy to put you in touch with operators and engineers who can share their experience with our product. If you have any questions regarding our proposal, please feel free to contact us or our local representative, Josh Ziembiec of Goble Sampson Associates, at 480-271-0519 or jziembiec@goblesampson.com.

Best regards,



Kenna Foster, EIT
Application Engineer | KUBOTA Membrane USA Corporation

Tel: 425-898-2858 ext. 108

Cell: 425-686-2705

Email: kenna.foster@kubota.com



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Bidder's Bid – Pricing Form

Item #	Description	Quantity	Unit	Unit Price	Amount
1	Membrane Cartridge Type 510	40	100/box	\$6,300.00	\$252,000.00
2	Tube 500L	4000	Each	\$2.00	\$8,000.00
3	Retaining Rubber S50R	160	Each	\$9.00	\$1,440.00
4	Permeate Manifold	20	Each	\$450.00	\$9,000.00
5	Flange 65A	20	Each	\$15.00	\$300.00
6	Cap 65A	20	Each	\$30.00	\$600.00
7	Membrane Case MS200 Upper Membrane Cassette	1	Each	\$15,000.00	\$15,000.00
8	Membrane Case MK200 Lower Membrane Cassette	1	Each	\$16,500.00	\$16,500.00
9	Freight	1	Each	\$6,000.00	\$6,000.00
Total Bid Amount					\$308,840.00

IV. BIDDER'S BID

4.1 Bidder's Bid: For the bid opening July 25th, 2016 for supplies.

4.2 Conditions Accepted: The undersigned Bidder declares that before preparing this bid, he or she has read the Bid Documents carefully, and that this bid is made with full knowledge of the kind, quality and quantity of supplies to be furnished by signing this bid. Bidder agrees to all conditions contained in the Bid Documents.

4.3 Bid Price: Kubota membrane cartridge filters type 510 and accessory equipment which includes: header tubing, retaining rubber S50R, Permeate manifold S200R, flanges and caps for the Kubota MBR wastewater treatment facility

Instructions for Bidders:

All Bid Prices shall include all freight, insurance, warranty costs, taxes and fees chargeable to the Town of Chino Valley and F.O.B Destination. prepaid to 2190 Rodeo Drive, Chino Valley, AZ 86323

Bidder will be responsible for and shall pay all sales, consumer, use, and other taxes. When equipment, materials or supplies generally taxable to the Bidder are eligible for a tax exemption, credit or deduction due to the nature of the item, at Bidder's request, Chino Valley will assist Bidder in applying for and obtaining the same.

The quantities listed are estimates only, and Chino Valley does not guarantee the stated quantities will be purchased. Chino Valley reserves the right to add or subtract from the stated quantities.

This is not an exclusive contract, Chino Valley reserves the right to purchase the same or similar supplies from other vendors.

4.4 Not Applicable.

4.5 Location of Parts and Service: State the location where parts and service will be available to Chino Valley for these supplies.

11807 North Creek Parkway S., Suite B-109, Bothell, WA 98011.
(Address)

425-898-2858
(Phone No.)

4.6 Guaranteed Delivery Time and Penalty: As part of this Bid, the Bidder shall give a guaranteed delivery time for the supplies to Chino Valley after Chino Valley places the

purchase order. Each and every calendar day that delivery is delayed, Chino Valley may deduct from the monies due or to become due to the Successful Bidder. The amount shall be the sum \$0 per calendar day, commencing on the day after the guaranteed day listed above. The total sum is not as a forfeit or penalty, but is for liquidated damages. This sum is fixed and agreed upon since the actual damage to Chino Valley and to the public is impossible or very difficult to determine. Delivery delays caused by Acts of God will be allowed and other causes beyond the Bidder's control may be allowed.

The Bidder's guaranteed delivery time is 90 days from issuance of the purchase order per the conditions above.

4.7 Contract Acceptance: Bidder proposes and agrees that if this bid is accepted, he or she will enter into a contract with Chino Valley within seven (7) days after Chino Valley's acceptance of this bid at the listed scheduled price.

4.8 Affidavit: The following affidavit is submitted by the Bidder as part of this bid:

The State of Arizona)
) ss.
Yavapai County)

The undersigned deponent, of lawful age, being duly sworn upon his oath, deposes and says:

1. That he/she has lawful authority to execute the within and foregoing Bidder's bid;
2. That Bidder has not directly or indirectly entered into any agreement, express or implied, with any Bidder or Bidders, having for its object the controlling of the price or amount of such bid or bids, the limiting of the bids or the Bidders, the parceling out to any Bidder or any other person of any part of the contract or any part of the subject matter of the bid or bids or of the profits thereof, and that he/she has not and will not divulge the sealed bid to any other person whatsoever, except those having a partnership or financial interest with him and said Bidder, until after the sealed bid or bids are open.

3. That Bidder has received any Addenda issued.

Name

Title

SUBSCRIBED AND SWORN TO BEFORE ME this 15 day of JULY, 2016,

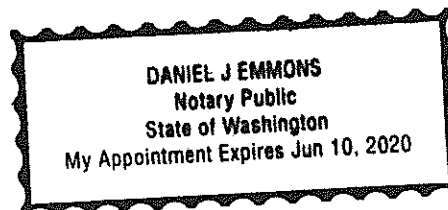
by TOSHIIKO MOTOHORI


Notary Public

My Commission Expires June 10, 2020

PLS:pls 2693852.2 6/7/2016

2



TOWN OF CHINO VALLEY, ARIZONA

AUTHORIZED SIGNATURE FORM

Contract Name:

WHEREAS, Kubota Membrane USA Corporation, an Washington corporation, is required to execute certain documents which are necessary for the prompt and efficient execution of the corporate business;

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the

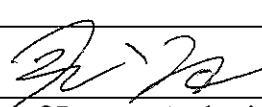
Kubota Membrane USA Corporation that Toshihiko Motohori
(Corporate Name) (Name of Parties Authorized)

is/are authorized to execute and sign on behalf of said corporation/company the following documents:

- | | |
|-----------------|--|
| 1. The CONTRACT | 5. CHANGE ORDERS |
| 2. The Bond | 6. All other papers necessary for the conduct |
| 3. Payrolls | of the corporation's affairs and the execution |
| 4. Claims | of the Contract. |

The above-named person is granted the authority and duties herein referenced for the duration of the CONTRACT for this PROJECT or until express notice of revocation has been duly given in writing, whichever is the lesser period.

DATED and passed by the Board of Directors this 15th day of July, 20 16.

 President
(Signature of Persons Authorized to Sign) (Title) (Document No.)

A. CERTIFICATE

STATE OF Washington)
) ss.
County of King)

I, president of the Kubota Membrane USA corporation, do hereby certify that the above is a true and correct copy of a resolution adopted by the Board of Directors of said corporation, at a meeting of said Board held on 7/15, 2016, and that the same is in full force and effect at this time.

DATED 7/15, 2016.

[Signature]
(Officer of Corporation)

(Seal of Corporation)

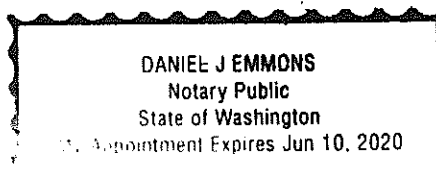
STATE OF WA)
) ss.
County of KING)

This instrument was acknowledged before me this 15TH day of JULY, 2016 by TOSHIHIKO MOTOHORI, appearing before the undersigned Notary Public, and stated that he executed such instrument on behalf of said corporation for the purpose and consideration therein expressed.

[Signature]
Notary Public

My Commission Expires:

June 10, 2020



Additional Content

Payment Terms

Kubota is proposing the following payment terms for the Chino Valley Membrane Replacement Project:

<u>Activity</u>	<u>Payment Percentage</u>
Receipt of Purchase Order	70%
Equipment Delivery	20%
Equipment Installation and Startup	10%

Descriptive Literature

All of Kubota's proposed products completely comply with the Specifications and Design Standards described in the Bid Documents. No deviations and/or modifications are needed to meet the Specification and Design Standards. Technical specifications for Kubota's H6A-510 Membrane Cartridge and EK400 Membrane Unit, which is comprised of an upper membrane case (MS200), a lower membrane case (MK200) (upper membrane case), and a diffuser case, can be found in Appendix A of this proposal.

Listed below is the contact information for Upper Sweetwater WWTP and Bandon Dunes WWTP, both of which have been operating using Kubota membranes for over ten (10) years without replacing the membranes.

Upper Sweetwater WWTP

Location: Villa Rica, GA

Commission Date: June 2005

Contact: Russell Kelly

Phone: 678-224-4082

Email: rkelly@paulding.gov

Bandon Dunes WWTP

Location: Bandon, OR

Commission Date: June 2002

Contact: Warren Felton

Phone: 541-347-5751

Email: wfelton@bandondunesgolf.com

Brief Description of Bidder

Kubota Membrane USA Corporation is a subsidiary of Kubota Corporation. Kubota Corporation has been designing and building wastewater treatment plants since the early 1960s. Long before building wastewater treatment plants, the company became involved with water engineering projects in 1893 as a manufacturer of iron piping, which was used for clean water distribution. As the largest engineering

contractor for wastewater treatment plants in Japan, Kubota has the capability to design, build and operate municipal and industrial wastewater treatment plants.

Kubota also just began operating a Research and Development (R&D) Center in Canton, OH. This center has a wastewater treatment facility with capacity to treat 60,000 gallons per day, and will also be a resource available to our clients.

Address: 11087 North Creek Parkway S., Suite B-109, Bothell, WA 98011

Phone: 425-898-2858

Fax: 425-898-2853

E-mail: kenna.foster@kubota.com

Tax ID Number

Kubota Membrane USA Corporation's Federal Tax Identification Number is 20-2298790.

Licenses

Kubota Membrane USA Corporation has no applicable licenses in the state of Arizona.

Disclosure

Kubota Membrane USA has not been debarred, suspended, or otherwise lawfully precluded from participating in any procurement activity.

Training

Kubota is offering the following training and services:

24/7 Technical Support (Always Free of Charge)

24/7 phone support is available in addition to support during regular business hours. 24-hour technical support calls are shared within the Kubota staff so that you can rest assured knowing that knowledgeable engineers and technicians are just a phone call away.

Annual Operator Workshop (No Additional Charge)

Kubota Membrane USA will host an annual operator workshop where operators can meet to exchange ideas and find out about the latest developments in MBR technology. Kubota covers the cost of these workshops and associated food and lodging.

Kubota's Operator Workshop in August 2015 was held in the state of Georgia and included a tour of the James Creek WRF.



Figure 1: Kubota's Operator Workshop in August 2015 in Georgia

Research and Development Center in Canton, Ohio

At our new Research and Development Center in Canton, OH, Kubota is operating a fully functional 60,000 gallon per day plant designed to test new membrane technologies, optimize existing technologies, and provide opportunities for plant operators to visit and learn new techniques for running our systems. This resource will be available to all of our clients on an as-needed basis.

Suppliers

Kubota will be the supplier of all materials provided.

Financial Statement

Available upon request.

TECHNICAL SPECIFICATION

KUBOTA H6A-510 MEMBRANE CARTRIDGE

GJS-14-015-0_EN

Specifications of Membrane Cartridges for KUBOTA Submerged Membrane Unit™

● Specification of Product

Item Name		Membrane Cartridge (type H6A)
Model		H-510
Dimensions (Height x Width x Thickness)		H1,020mm × W490mm × T6mm
Dry Mass		3.2 kg
Membrane Sheet	Classification	Microfiltration (MF) Membrane
	Nominal Pore Size	0.4 μm (average 0.2 μm)
Effective Membrane Area		0.8 m ²
Initial Flow Rate with Clean Water ^{*1}		930 mL/min or more (at 20°C, 5 kPa)
Usage Conditions ^{*2}	Intended Use	Solid-Liquid Separation of Activated Sludge
	Filtration Pressure	20 kPa or less
	Water Temperature	5 ~ 40 °C
	pH	1 ~ 10
Chemicals for cleaning ^{*3}	Sodium Hypochlorite	1.0 % or less
	Oxalic Acid ^{*4}	1.0 % or less
Optional parts (These parts shall be ordered separately)		Hand Hook
		Tube
Precaution in Storage		Avoid direct sunlight and wetness
		Keep fire away
*1 This indicates the performance of a Membrane Cartridge alone. For the performance as a Membrane Unit, refer to "Specifications of KUBOTA Submerged Membrane Unit™". *2 While these indicate the conditions of a Membrane Cartridge alone, always use it in KUBOTA Submerged Membrane Unit™. For the conditions as a Membrane Unit, refer to "Specifications of KUBOTA Submerged Membrane Unit™". *3 These indicate the allowable concentration for a Membrane Cartridge alone. When conducting a Chemical Cleaning as a Membrane Unit, refer to "Specifications of KUBOTA Submerged Membrane Unit™". *4 If calcium carbonate precipitates in the tank, dose hydrochloric acid (2% or less) or citric acid (0.5~1% or less).		

[Before using this product, read "Instruction Manual for KUBOTA Submerged Membrane Unit™".]

TECHNICAL SPECIFICATION

KUBOTA EK400 SUBMERGED MEMBRANE UNIT

[1/2]

GJS-14-004-0_EN

Specifications of KUBOTA Submerged Membrane Unit™

● Specifications of Product

Model			EK400R2.2
Dimensions (Height x Width x Length)			H3,506 mm × W2,921 mm × L620 mm
Mass	Upper Membrane Case	Dry Mass	830 kg
		Wet Mass ^{*1}	1,630 kg
	Lower Membrane Case	Dry Mass	900 kg
		Wet Mass ^{*1}	1,700 kg
	Diffuser Case		120 kg
	Lifting Tool ^{*2}		110 kg
	Total Maximum of Lifted Membrane Case ^{*1}		1,810 kg
Number of Membrane Cartridges			400 cartridges
Effective Membrane Surface Area			320 m ²
Nominal (Maximum) Pore Diameter of Membrane Sheet			0.4 μm (average 0.2 μm)
Initial Flow Rate with Clean Water ^{*3}			296 L/min (at 20°C, 5 kPa)
Diffuser Air Supply Rate	Required		2.80 m ³ /min
	Maximum		4.00 m ³ /min
Pressure Loss in Diffuser			1 kPa or less
Filtration Pressure ^{*4}			20 kPa or less
Chemical Injection Pressure	Constant		10 kPa or less
	Instantaneous		20 kPa or less
Diameter of Pipe Connection	Air		JIS VP75 or equivalent
	Permeate		JIS VP65 or equivalent
Periodical Replacement Parts			Retaining Rubber (every three years)
			Tube (every three years)
			Membrane Cartridge (depending on usage conditions)
Optional Parts <i>(These parts shall be ordered separately)</i>			Guide Set
			Lifting Tool
			Hand Hook
			Hanger Ring Set
Precautions in Storage			Avoid direct sunlight and wetness
			Keep fire away

^{*1} Assuming that all the gaps between the Membrane Cartridges are clogged.

^{*2} Optional part

^{*3} This does not indicate the treatment capacity with real mixed liquor.

^{*4} Difference (P1-P2) between the pressures while filtration is OFF (P1) and ON (P2)

[2/2]

● Design Considerations

Usage Conditions	Intended Use ^{*5}		Solid-Liquid Separation of Activated Sludge	
	Filtration Method		Suction Filtration	
	Water Temperature		5 ~ 40 °C	
	pH		5 ~ 10	
	Required Minimum Water Level (from the base of Diffuser Case)		4,000 mm	
	Sludge Properties ^{*6} (recommended)	MLSS	5,000 ~ 20,000 mg/L	
		Viscosity	100 mPa・s or less	
		Paper Filtration Test	10 mL/5min or more	
		DO	1 mg/L or more	
	Temperature		15 ~ 35 °C	
pH		6 ~ 8		
Method of Fixation	Diffuser Case		Anchor Bolts (M16×230L, depth 130mm)	
	Membrane Case		Guide Set	
Ancillary Equipment (to be provided by Customer)				
Membrane Blower				
Diffuser Cleaning Valve				
Devices to discharge Permeate				
		Suction Filtration	Suction Pump, Pressure Gauge (Negative or Combination Gauge), Constant Flow Valve (or Flow Regulator + Flow Meter)	
Chemical Injection Port or Equipment				
Recommended Piping Diameter	Blower		JIS VP75 or equivalent	
	Diffuser Cleaning		JIS VP75 or equivalent	
	Permeate ^{*7}		JIS VP65 or equivalent	
Precautions in Operation			Avoid aeration while filtration stops as much as possible	
			Stop filtration while aeration stops or Diffuser is cleaned	
^{*5} Pretreatment may be required for the following types of wastewater: ・Wastewater with oil, trash, or debris ・Wastewater with high contents of iron, manganese, calcium, or silicon				
^{*6} Use these values as rough targets for treatment control.				
^{*7} Design the system so as to prevent permeate backflow and air trap while filtration stops.				

● Maintenance Considerations

● Maintenance Considerations

In Situ Chemical Cleaning	Chemical type	Sodium Hypochlorite	0.6% or less when MLSS is more than 10,000mg/L
			0.3% or less when MLSS is 10,000mg/L or less
		Oxalic Acid* ⁸	0.5 ~ 1.0 % or less
	Dosage Volume		1,200 L
	Timing		When filtration pressure rises by 5 ~ 10kPa from the initial or every six months or more often
Diffuser Cleaning	Manual		Every two weeks or more often, for five minutes
	Automatic		Once a day, for five minutes

*⁸ If calcium carbonate precipitates in the tank, dose hydrochloric acid (less than 2.0%) or citric acid (less than 1.0%).

[Read the Instruction Manual for KUBOTA Submerged Membrane Unit™ before using this product.]

REFERENCE #1

McFARLAND CREEK WWTP

For Earth, For Life



Similar Projects (Use Separate Sheets as needed)

Similar Project #1

BIDDER: Kubota Membrane USA

(Bidder's name)

- a. Name of Similar Project #1: McFarland Creek WWTP
- b. Contracting Party (Owner):
 Name: Geauga County.
 Address: 17630 Chagrin River Rd, Chagrin Falls, OH 44023
 Telephone Number: (440) 247-7284
- c. If Joint Venture, names of each participant:

- d. Contract Price: \$1,743,354
- e. Description of Similar Project #3: Kubota Membrane USA provided the original ES200 Submerged Membrane Units for this 1.8 MGD WWTP. In December 2015, Kubota Membrane USA replaced the ES200 units with RM200 units. Also included in this Contract was all labor required for the membrane unit replacement.
 (Briefly describe here, and attach a copy of the description in the Contract. Technical specifications may be requested by CONTRACTOR.)
- f. Construction Manager(s) during the Similar Project #3:
 Name: Gary Sipe with Johnson Controls Inc.
 Address: 1044 Meridian Rd Suite A, Youngstown, OH 44509
 Telephone Number: (330) 565-7530
- g. Start date (notice to proceed issued): 10/07/2015
- h. Completion date provided for in the Contract: 12/17/2015
- i. Substantial completion date (approved by Owner): 12/16/2015
- j. Reasons why work was completed early, or why delays occurred:
N/A

For Earth, For Life



- k. Final price paid by Owner for the Similar Project #1: \$1,743,354
- l. If final price was 10% less or more than the original Contract Price, describe why:
N/A
- m. Describe any large cost over-runs (claims in excess of \$_____) disputed or contested by the owner, the reason for the dispute, and ultimate resolution of the dispute:
N/A
- n. Did Owner file a lawsuit against Bidder concerning performance?
 Yes _____ No X If so, what was the result? _____
- o. Following final payment on the Similar Project, has Bidder voluntarily or otherwise provided any additional work or repairs, or made any payments to the Owner to cure defects or fulfill warranties made to the Owner concerning the quality of the performance/or the work involved in the Similar Project? Describe:
N/A
- p. Has your company undergone a major change in ownership, management, size, or expertise since the time of this Similar Project? Yes _____ No X Describe: _____

All answers should be complete and informative. Attach additional sheets if needed to give a full answer. Town may, in its discretion, request Bidder to provide additional information concerning this Similar Project as part of its evaluation of the responsibility of the Bidder prior to award of the Contract

REFERENCE #2

NASSAU REGIONAL WWTP

For Earth, For Life



Similar Projects (Use Separate Sheets as needed)

Similar Project #2

BIDDER: Kubota Membrane USA

(Bidder's name)

- a. Name of Similar Project #2: Nassau Regional WWTP
- b. Contracting Party (Owner):
 Name: JEA
 Address: 1840 Cedar Bay Road Jacksonville, FL, 33218
 Telephone Number: (904) 665-7916
- c. If Joint Venture, names of each participant:

- d. Contract Price: \$393,960
- e. Description of Similar Project #2: This project included the purchase of membrane cartridge H6A-510, retaining rubber, and tube.
 (Briefly describe here, and attach a copy of the description in the Contract. Technical specifications may be requested by CONTRACTOR.)
- f. Construction Manager(s) during the Similar Project #3:
 Name: N/A
 Address: _____
 Telephone Number: ()
- g. Start date (notice to proceed issued): 01/26/2016
- h. Completion date provided for in the Contract: 04/12/2016
- i. Substantial completion date (approved by Owner): 04/04/2016
- j. Reasons why work was completed early, or why delays occurred:
Membrane shipment was on schedule. Owner accepted membranes to be delivered 1 week prior to ETA specified in the Contract.

For Earth, For Life

Kubota

- k. Final price paid by Owner for the Similar Project #2: \$393,960
- l. If final price was 10% less or more than the original Contract Price, describe why:
N/A
- m. Describe any large cost over-runs (claims in excess of \$) disputed or contested by the owner, the reason for the dispute, and ultimate resolution of the dispute:
N/A
- n. Did Owner file a lawsuit against Bidder concerning performance?
Yes No X If so, what was the result?
- o. Following final payment on the Similar Project, has Bidder voluntarily or otherwise provided any additional work or repairs, or made any payments to the Owner to cure defects or fulfill warranties made to the Owner concerning the quality of the performance/or the work involved in the Similar Project? Describe:
N/A
- p. Has your company undergone a major change in ownership, management, size, or expertise since the time of this Similar Project? Yes No X Describe:

All answers should be complete and informative. Attach additional sheets if needed to give a full answer. Town may, in its discretion, request Bidder to provide additional information concerning this Similar Project as part of its evaluation of the responsibility of the Bidder prior to award of the Contract

REFERENCE #3

NORFOLK WWTP

Similar Projects (Use Separate Sheets as needed)

Similar Project #3

BIDDER: Kubota Membrane USA

(Bidder's name)

- a. Name of Similar Project #3: Norfolk WWTP
- b. Contracting Party (Owner):
 Name: Massachusetts Department of Correction
 Address: 50 Maple Street, Milford, MA 01757
 Telephone Number: (508) 422-3300
- c. If Joint Venture, names of each participant:

- d. Contract Price: \$211,300
- e. Description of Similar Project #2: This project included the purchase of Type 515 membrane cartridges and upper and lower membrane modules for RW300 units.
 (Briefly describe here, and attach a copy of the description in the Contract. Technical specifications may be requested by CONTRACTOR.)
- f. Construction Manager(s) during the Similar Project #3:
 Name: N/A
 Address: _____
 Telephone Number: ()
- g. Start date (notice to proceed issued): 02/22/2016
- h. Completion date provided for in the Contract: 05/30/2016
- i. Substantial completion date (approved by Owner): 05/30/2016
- j. Reasons why work was completed early, or why delays occurred:
N/A

For Earth, For Life



- k. Final price paid by Owner for the Similar Project #3: \$211,300
- l. If final price was 10% less or more than the original Contract Price, describe why:
N/A
- m. Describe any large cost over-runs (claims in excess of \$_____) disputed or contested by the owner, the reason for the dispute, and ultimate resolution of the dispute:
N/A
- n. Did Owner file a lawsuit against Bidder concerning performance?
 Yes_____ No X If so, what was the result? _____
- o. Following final payment on the Similar Project, has Bidder voluntarily or otherwise provided any additional work or repairs, or made any payments to the Owner to cure defects or fulfill warranties made to the Owner concerning the quality of the performance/or the work involved in the Similar Project? Describe:
N/A
- p. Has your company undergone a major change in ownership, management, size, or expertise since the time of this Similar Project? Yes_____ No X Describe: _____

All answers should be complete and informative. Attach additional sheets if needed to give a full answer. Town may, in its discretion, request Bidder to provide additional information concerning this Similar Project as part of its evaluation of the responsibility of the Bidder prior to award of the Contract

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TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. a.

Meeting Date: 08/09/2016
Contact Person: Phyllis Smiley, Town Attorney
Department: Town Attorney
Item Type: Action Item
Estimated length of staff presentation: 5 minutes
Physical location of item: n/a

AGENDA ITEM TITLE:

Consideration and possible action to approve Resolution No. 16-1089 approving a guaranteed energy cost savings program and agreements with Climatec, LLC for purchase and installation of improvements to Town facilities for the purpose of reducing energy costs and to measure and verify the savings after the installation is complete. (Phyllis Smiley, Town Attorney)

RECOMMENDED ACTION:

Approve Resolution No. 16-1089, to approve a guaranteed energy cost saving program and the following agreements with Climatec LLC:

- (i) Installation Agreement in the amount of \$606,135.00, and
- (ii) Measurement and Verification Agreement in the amount of \$4500 per year for the first 3 years. (If the Town chooses to extend the Measurement and Verification Agreement, the per year cost will escalate by 4% annually for every subsequent year after the third year, for a maximum term of 15 years. Staff does not recommend extension of the Measurement and Verification Agreement)

SITUATION AND ANALYSIS:

Issue Statement:

The Town of Chino Valley's energy costs are high and in need of economizing. Cost-saving measures are necessary to allow the Town to use its funds on services that more directly benefit the citizens of Chino Valley and the public in general.

Applicable "Policy"

A.R.S. Section 34-105, authorizing municipalities to enter into a guaranteed energy cost savings contract with a qualified provider provided the amount spent on the energy cost savings measures recommended in the proposal does not exceed the amount to be saved in energy costs over the expected life of the equipment.

Satisfaction of "Policy"

Summary of Issues and Staff Rationale

In order to reduce the Town's energy costs and take advantage of the programs as authorized by ARS 34-105, Staff, with direction from Council, entered into negotiations with Climatec, LLC to create an energy savings program consisting of replacement installation of lighting, HVAC, and other Town electrical equipment, as noted in the attachments to the Installation Agreement for a cost to the Town of \$606,135.00. It is anticipated that the installation of the equipment will be completed by December 31, 2016.

Once the installation is complete, the measurement and verification of energy use will commence pursuant to the Measurement and Verification Agreement. For a cost to the Town of \$4,500 per year, Climatec will measure and verify the energy savings associated with the installation of the new and replacement equipment. It is anticipated that the energy savings over the 15 year term of the agreement will more than cover the cost of the installation of the new and replacement equipment. If this is not the case, Climatec has committed to pay the difference.

The Town Attorney reviewed the Agreements and recommended revisions with which Climatec agreed.

Findings of Fact

Other Pertinent Documents Available Upon Request:

Climatec Installation Agreement, Attachment "D" - Due to the size of Attachment "D," it is not included in this packet, but it will be included with the online version as a separate document. See <http://www.chinoaz.net/AgendaCenter>. A printed copy is available for viewing in the Town Clerk's/Town Council Office.

Fiscal Impact

Fiscal Impact?: yes
If Yes, Budget Code: not sure
Available: yes
Funding Source:

Attachments

Resolution 16-1089
 Climatec Installation Agreement, without Attachment D
 Climatec Measurement & Verification Agreement

RESOLUTION NO. 16-1089

A RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE TOWN OF CHINO VALLEY, COUNTY OF YAVAPAI, ARIZONA, TO APPROVE A GUARANTEED ENERGY COST SAVINGS PROGRAM AND ASSOCIATED AGREEMENTS WITH CLIMATEC TO UNDERTAKE IMPROVEMENTS TO THE TOWN'S FACILITIES FOR REDUCING ENERGY CONSUMPTION COSTS AND TO MEASURE AND VERIFY THE SAVINGS AFTER THE INSTALLATION IS COMPLETE; PROVIDING FOR REPEAL OF CONFLICTING RESOLUTIONS; AND PROVIDING FOR SEVERABILITY

WHEREAS, the Town Council of the Town of Chino Valley seeks to improve Town facilities and reduce the Town's energy consumption costs; and

WHEREAS, the Town Council directed the Staff to work with Climatec LLC Energy Group ("Climatec") to develop a plan for improvements to the Town facilities and reduce energy costs to the Town; and

WHEREAS, Climatec examined Town facilities and presented to the Town Council a project plan that both improves facilities and reduces energy costs; and

WHEREAS, pursuant to A.R.S. § 34-105, the State of Arizona authorizes municipalities to enter into a guaranteed energy cost savings contract with a qualified provider provided the amount spent on the energy cost savings measures recommended in the proposal does not exceed the amount to be saved in energy costs over the expected life of the equipment; and

WHEREAS, the Town of Chino Valley Town Council has determined that the amount the Town would spend on the energy cost savings measures recommended in the proposal from Climatec will not exceed the amount to be saved in energy costs over the expected life, according to the manufacturer's equipment standards, of the energy cost savings measures implemented, the term of the financial agreement, or twenty-five years, whichever is shortest, after the date that the installation or implementation is complete, if the recommendations of the proposal are followed; and

WHEREAS, the Town Council has determined that Climatec's proposed project, as set forth in the proposed Installation Agreement and Measurement and Verification Agreement meets the criteria for the project,

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Common Council of the Town of Chino Valley, County of Yavapai, Arizona, that

1. The Energy Cost Savings Program and associated Climatec Installation Agreement for Town of Chino Valley and Climatec Measurement and Verification Agreement for Town of Chino Valley are hereby approved; and

2. The Mayor is authorized to execute the Agreements; and

3. The Town Manager is authorized to execute and deliver any and all documents necessary or advisable in order to complete the transactions contemplated under the Agreements; and

4. That funds for the purchase of the energy cost savings equipment and facilities in the amount of \$606,135.00 shall be obtained from Zion Bank, N.A. under a separately negotiated contract.

BE IT FURTHER RESOLVED that all resolutions or parts of resolutions in conflict with the provisions of this resolution are hereby repealed.

BE IT FURTHER RESOLVED that if any section, subsection, sentence, clause, phrase or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

PASSED AND ADOPTED by the Mayor and Common Council of the Town of Chino Valley, Arizona this 9th day of August, 2016.

Chris Marley, Mayor

ATTEST:

Jami C. Lewis, Town Clerk

APPROVED AS TO FORM:

Phyllis L.N. Smiley, Town Attorney

I hereby certify the above foregoing Resolution No. 16-1089 was duly passed by the Council of the Town of Chino Valley, Arizona, at a regular meeting held on August 9, 2016, and that quorum was present thereat and that the vote thereon was ____ ayes and ____ nays and ____ abstentions. ____ Council members were absent or excused.

Jami C. Lewis, Town Clerk

The following exhibits are attached hereto and incorporated herein:

1. Climatec Installation Agreement for Town of Chino Valley
2. Climatec Measurement and Verification Agreement for Town of Chino Valley

INSTALLATION AGREEMENT FOR Town of Chino Valley

TERMS AND CONDITIONS

ATTACHMENTS

Attachment "A" – Scope of Work

Attachment "B" - Lighting Summary

Attachment "C" – Mechanical Equipment Schedule

Attachment "D" – Technical Appendix

Attachment "E" – Form of Change Order

CLIMATEC INSTALLATION AGREEMENT

This Installation Agreement ("Agreement") dated July 21, 2016 ("Effective Date") is made by and between:

Town of Chino Valley, AZ
 ("Purchaser") with its principal place of business at
 202 N. State Route 89, Chino Valley, AZ 86323
 and

Climatec LLC
 With its principal place of business at
 2851 W. Kathleen Rd., Phoenix, AZ 85053

Purchaser and Climatec LLC agree as follows:

1. **INSTALLATION.** Climatec LLC shall provide Purchaser with an Energy Efficiency Program, as identified in **Attachment(s) A, B, C, and D**, and incorporated herein by reference (hereinafter referred to as the "Work") at the total fixed price of \$606,135.00 including required taxes and Performance Bond (if requested) (the "Contract Amount").

Climatec LLC is responsible for the design, engineering, permits, fees, approvals, project management, installation, startup, training, checkout, warranty, and insurance specifically associated with the Work to be performed. Climatec LLC is not responsible for any equipment, systems, controls, comfort problems, balancing, duct cleaning, existing deficient conditions, etc. not specifically included in this Agreement. Climatec LLC will provide submittals and engineered drawings (if required), for Purchaser's technical review and written approval, prior to initiating construction. All construction and associated cleanup shall be performed and scheduled so as to minimize any disruption with any ongoing Purchaser activities. Climatec LLC requires all underground conduits between buildings to be clear of obstruction, of sufficient size to accommodate new wire and cable, and easily accessible. The Purchaser is responsible for Ethernet drops at each location for Energy Management System communication. This proposal offer is valid until October 20, 2016.

2. **SCOPE OF WORK.** Once this contract is executed by the Purchaser and Climatec LLC, Climatec LLC may not revise the contract in any way except by mutual agreement with the Purchaser.

The repair, updating, replacing of any existing customer components or systems is excluded from this contract unless specifically detailed in the scope. Climatec will notify the owner of any existing deficiencies found and if requested, may provide repair or replacement services as a separate item if requested. This agreement is based upon the use of straight time labor only unless stated otherwise in this agreement. Purchaser agrees to provide Climatec LLC with required field utilities (electricity, toilets, drinking water, etc.) without charge. Climatec LLC agrees to keep the jobsite clean of debris arising out of its own operations. Purchaser shall not back charge Climatec LLC for any cost or expenses without Climatec LLC's written consent. Unless specifically noted in the statement of the scope of the work or services undertaken by Climatec LLC under this agreement, Climatec LLC's obligations under this agreement expressly exclude any work or service of any nature associated or connected with the identification, abatement, clean up, control, removal or disposal of environment Hazards or dangerous substances, to include but not to be limited to asbestos, PCBs, or mold discovered in or on the premises. Any language or provision of the agreement elsewhere contained which may authorize or empower the Purchaser to change, modify or alter the scope of work or services to be performed by Climatec LLC shall not operate to compel Climatec LLC to perform any work relating to Hazards without Climatec LLC's express written consent.

3. **INVOICING & PAYMENTS.** Climatec LLC may invoice the Purchaser for any equipment and/or materials installed at a job site. Purchaser agrees to pay Climatec LLC amounts invoiced upon receipt of invoice. Waivers of lien will be furnished upon request, as the work progresses; to the extent payments are received. If Climatec LLC's invoice is not paid within 30 days of its issuance, it is delinquent and Climatec LLC may add 1% per month interest onto delinquent amounts.

4. **INDEPENDENT CONTRACT.** It is agreed between Purchaser and Climatec LLC that Climatec LLC shall perform the Work as an independent contractor. Climatec LLC may use subcontractors to perform work hereunder, provided Climatec LLC shall fully pay said subcontractors and in all instances remain fully responsible for (a) the proper completion of this agreement and (b) supervising such subcontractor's work and for the quality of the work they produce.
5. **MATERIALS.** All materials shall be new, in compliance with all applicable laws and codes, and shall be covered by a manufacturer's warranty, if appropriate. If the materials or equipment included in this agreement become temporarily or permanently unavailable, the time for performance of the work shall be extended to the extent thereof, and in case of permanent unavailability, Climatec LLC shall (a) be excused from furnishing said materials or equipment, and (b) be reimbursed for the difference between the cost of the materials or equipment permanently unavailable and the cost of a reasonable substitute therefore.
6. **COMPLETION.** The work specified in Section 1 shall be considered completed upon approval by the Purchaser, provided that the Purchaser's approval shall not be unreasonably withheld.
7. **WARRANTY.** Climatec LLC warrants that the equipment and systems provided under this contract shall be free from defects in material and workmanship arising from normal usage for a period of one year from the date of beneficial use or eighteen months from delivery of said equipment or systems. Within the warranty period, if Purchaser provides written notice to Climatec LLC of any such defects within thirty (30) days after the appearance or discovery of such defect, Climatec LLC shall, at its option, repair or replace the defective equipment and return said equipment to Purchaser. All transportation charges incurred in connection with the warranty for equipment shall be borne by Purchaser, unless otherwise provided for in manufacturer warranties. These warranties do not extend to any equipment which has been repaired by others, abused, altered or misused, or which has not been properly and reasonably maintained. All transferrable manufacturer warranties associated with the equipment will be transferred to the Purchaser. These warranties are in lieu of all other warranties, expressed or implied, including but not limited to those of merchantability and fitness for a specific purpose.
8. **LIABILITY.** Climatec LLC shall not be liable for any special, indirect, or consequential damages arising in any manner from the equipment or material furnished or the work performed pursuant to this agreement.
9. **TAXES.** The price of this agreement includes duties, sale, use, excise or other similar taxes required by federal, state or local laws in effect at the time of agreement execution.
10. **REBATES, UTILITY INCENTIVES, AND GRANTS** Unless otherwise stated in the project scope-of-work, or cash flow analysis, any and all rebates, incentives, grants that are earned through the course of this project from public or private utilities, municipalities, development districts or state funding are 100% the property of Climatec LLC or their designee. The paperwork, inspections and verification required to collect these monies are the sole responsibility of Climatec LLC. The customer agrees to assist Climatec LLC where required by the jurisdiction in the form of data required for the application and authorizing signatures. In the event the Customer incurs expenses related to the processing of the applications, Climatec LLC shall reimburse these direct costs.
11. **TAX CREDITS, TAX DEDUCTIONS AND 179d QUALIFYING CREDITS** Unless otherwise stated in the contract, any and all eligible tax credits or incentives that can be earned through the course of this project from State, Local or Federal agencies for energy efficient design are 100% the property of Climatec LLC or their designee. The paperwork, inspections and verification required to collect these credits are the sole responsibility of Climatec LLC. The customer agrees to assist Climatec LLC where required by the jurisdiction in the form of data required for the application and authorizing signatures and/or transfers. In the event the Customer incurs expenses related to the processing of the applications, Climatec LLC shall reimburse these direct costs.
12. **DELAYS.** Climatec LLC shall not be liable for any delay in the performance of the work resulting from or attributed to acts of circumstance beyond Climatec LLC's control, including but not limited to acts of God, riots, labor disputes, conditions of the premises, acts or omissions of the Purchaser, or other Contractors or delays caused by suppliers or subcontractors of Climatec LLC, etc. If Purchaser delays project for greater than 60 days, Climatec LLC can recover any cost inflation on un-billed materials that were either stored or yet to be purchased.

13. **COMPLIANCE WITH LAWS.** Climatec LLC shall comply with all applicable federal, state, and local laws and regulations. All licenses and permits required for the prosecution of the work shall be obtained and paid for by Climatec LLC.
14. **DISPUTES.** Written notice of any Dispute must be provided to the other party, describing specific details of the dispute within seven (7) days of the occurrence of the condition. This notice must be provided via certified mail. For a reasonable period commencing on the day written notice of Dispute was provided, but not to exceed thirty (30) days, the parties shall in good faith attempt to resolve the Dispute. If the parties are unable to resolve the Dispute during this period, the parties shall proceed to binding arbitration. The arbitrator shall be neutral and mutually acceptable. The arbitrator shall determine all rights and obligations under this Agreement and the award of the arbitrator shall be final, binding, and enforceable. Any award issued pursuant to this provision may be enforced in a court of competent jurisdiction, and each party hereby consents to that jurisdiction. All venues for arbitration shall be in the locality in which the project is located.
15. **CHANGE ORDER (Mid-Performance Amendments).** Climatec LLC and the Purchaser recognize that:
 - a. Purchaser may desire a mid-job change that would alter time and cost to the specified work or inconvenience Climatec LLC.
 - b. Purchaser and Climatec may, at any time, and by written change order, make changes in the services to be performed under this Agreement. A form of change order is attached hereto as Attachment E. If such changes cause an increase or decrease in Climatec LLC's cost or time required for performance of any services under this Agreement, an equitable adjustment shall be made and the Agreement shall be modified in writing accordingly. Any claim of Climatec for adjustment under this clause must be submitted in writing within thirty (30) days from the date of receipt by Climatec of the notification of change. It is distinctly understood and agreed by the parties that no claim for extra services provided or materials furnished by Climatec will be allowed by Purchaser except as provided herein; nor shall Climatec provide any services or furnish any materials not covered by this Agreement unless Purchaser first approves in writing.
16. **INSURANCE.** Climatec LLC will maintain comprehensive liability and other insurance in amounts not less than those set forth below. Such insurance shall protect Climatec LLC and the Purchaser against any claims, losses, liabilities and expenses arising from the Work, whether performed by Climatec LLC or any subcontractor of Climatec LLC. The coverage shall include:
 - a. Workmen's Compensation and Employers Liability Insurance - \$1,000,000 each accident; \$1,000,000 each employee/disease; and \$1,000,000 policy limit.
 - b. Comprehensive or Commercial General Liability - Bodily injury liability of \$1,000,000 per occurrence and general aggregate liability of \$2,000,000 per occurrence.
 - c. Comprehensive Automobile Insurance – Combined single limit of \$1,000,000 per occurrence.

If the Purchaser requires that Climatec LLC maintain any special insurance coverage, policy, amendment, or rider, the Purchaser shall pay the additional cost.
17. **INDEMNITY.** To the fullest extent permitted by law, Climatec shall indemnify and hold harmless Purchaser, its officers, officials and employees from and against all liabilities, damages, losses and expenses (including reasonable attorney fees and court costs), caused by, arising out of, or resulting from the negligence, recklessness or intentional wrongful conduct of Climatec, its subcontractors, employees or any other persons used by Climatec or its subcontractors (hereinafter collectively "Climatec") related to the Services in the performance of this Agreement. Climatec LLC's duty to indemnify and hold harmless Purchaser, its officers, officials and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use of resulting therefrom, caused by Climatec LLC's negligence, recklessness or intentional wrongful conduct in the performance of this Agreement and the negligence, recklessness or intentional wrongful conduct of any person employed by Climatec or used by Climatec in the performance of this Agreement. Such indemnity does not extend to Purchaser's negligence, recklessness or intentional wrongful conduct.

18. **NON-APPROPRIATIONS.** This Agreement is subject in all respects to the provisions of the Arizona Constitution, article IX, §5, A.R.S. § 42-17106, and applicable Arizona common law.
19. **OCCUPATIONAL SAFETY AND HEALTH.** The Parties hereto agree to notify each other immediately upon becoming aware of any alleged violation of, the Occupational Safety and Health Act (OSHA) relating in any way to the project or project site.
20. **ENTIRE AGREEMENT.** This agreement, upon acceptance, shall constitute the entire agreement between the parties and supersedes any prior representations or understandings.
21. **CHANGES.** No change or modification of any of the terms and conditions stated herein shall be binding upon Climatec LLC unless accepted by Climatec LLC in writing.
22. **SEVERABILITY.** If one or more of the provisions of this agreement are held to be unenforceable under laws, such provision(s) shall be excluded from these terms and conditions and the remaining terms and conditions shall be interpreted as if such provision were so excluded and shall be enforced in accordance to their terms and conditions.
23. **COUNTERPARTS.** This agreement may be executed in multiple counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. A signature on a copy of this agreement received by either party by facsimile or portable document format (PDF) is binding upon the other party as an original. The parties shall treat a photocopy of such facsimile as a duplicate original.
24. **ASSIGNMENT.** Climatec LLC retains the right to assign its rights and obligations of this agreement with written consent of Purchaser.
25. **ACKNOWLEDGMENT.** Both Climatec LLC and the Purchaser acknowledge having read this agreement and all contract documents incorporated herein and have executed this agreement on the date written above.
26. **APPROVAL.** Each party represents that the person that has executed this agreement on its' behalf is authorized to do so.
27. **CONFLICT OF INTEREST.** Each party gives notice to the other parties that A.R.S. § 38-511 provides that the State of Arizona (the "*State*"), its political subdivisions or any department or agency of either, may within three (3) years after its execution cancel any contract without penalty or further obligation made by the State, its political subdivisions or any of the departments or agencies of either, if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the State, its political subdivisions or any of the departments or agencies of either, is at any time while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party to the contract with respect to the subject matter of the contract.
28. **E-VERIFY REQUIREMENTS.** To the extent applicable under A.R.S. § 41-4401, Climatec LLC and its subcontractors warrant compliance with all federal immigration laws and regulations that relate to their employees and compliance with the E-verify requirements under A.R.S. § 23-214(A). Climatec LLC's, or its subcontractor's, breach of the above-mentioned warranty shall be deemed a material breach of this Agreement and may result in the termination of this Agreement by the Purchaser. The Purchaser retains the legal right to randomly inspect the papers and records of Climatec LLC and its subcontractors who work on this Agreement to ensure that Climatec LLC and its subcontractors is complying with the above-mentioned warranty.

Climatec LLC and its subcontractors warrant to keep the papers and records open for random inspection by the Purchaser during normal business hours. Climatec LLC and its subcontractors shall cooperate with the Purchaser's random inspections including granting the Purchaser entry rights onto its property to perform the random inspections and waiving their respective rights to keep such papers and records confidential.
29. **TERM.** The term of this contract is from the date of final signature until the date of completion and final acceptance of the scope of work by the Purchaser.

30. TERMINATION.

- a. For Convenience by Purchaser. Purchaser may, at any time, with or without reason, terminate this Agreement and compensate Climatec, LLC only for services satisfactorily rendered to the date of termination. Written notice by Purchaser shall be sufficient to stop further performance of services by Climatec, LLC. Notice shall be deemed given when received by Climatec, LLC or no later than three (3) days after the day of mailing, whichever is sooner. In the event that Purchaser terminates this Agreement pursuant to this section, Purchaser shall compensate Climatec, LLC for work completed to date.
- b. With Cause by Purchaser. Purchaser may terminate this Agreement upon giving of written notice of intention to terminate for cause. Cause shall include:
 - i. material violation of this Agreement by Climatec, LLC; or
 - ii. any act by Climatec, LLC exposing the Purchaser to liability to others for personal injury or property damage; or
 - iii. Climatec, LLC is adjudged bankrupt, Climatec, LLC makes a general assignment for the benefit of creditors or a receiver is appointed on account of Climatec, LLC's insolvency.
- c. Written notice by Purchaser shall contain the reasons for such intention to terminate and unless within three (3) calendar days after that notice the condition or violation shall cease, or satisfactory arrangements for the correction thereof be made, this Agreement shall upon the expiration of the three (3) calendar days cease and terminate. In the event of this termination (for Cause), the Purchaser may secure the required services from another provider. If the reasonable expense, fees, and costs to the Purchaser exceed the cost of providing the service pursuant to this Agreement, Climatec, LLC shall pay the excess expense, fees, and/or costs to the Purchaser.
- d. Upon termination, Climatec, LLC shall provide the Purchaser with all documents produced maintained or collected by Climatec, LLC pursuant to this Agreement, whether or not such documents are final or draft documents.

- 31. NOTICES.** This Agreement shall be managed and administered on behalf of the respective parties by the individuals identified below. All invoices shall be submitted to and approved by the Purchaser's representative so identified. In addition to personal service, all notices may be given to Purchaser and to Climatec LLC by first class mail addressed to said party.

Climatec LLC:
 2851 W. Kathleen Rd.
 Phoenix, AZ 85053
 Contact Person:
 Roy Palella
 Operations Manager
 Phone 602-906-4166
 RoyP@climatec.com

Town of Chino Valley:
 202 N. State Route 89
 Chino Valley, AZ 86323
 Contact Person:
 Robert Smith
 Town Manager
 928-636-2646
 rsmith@chinoaz.net

- 32. NON-BOYCOTT OF ISRAEL.** Climatec LLC hereby certifies that it is not currently engaged in, and agrees for the duration of this Agreement that it will not engage in, a boycott of Israel, as that term is defined in A.R.S. § 35-393.
- 33. UTILIZATION OF LOCAL CONTRACTORS.** Climatec hereby agrees to solicit and utilize local contractor(s), where applicable, for all non-proprietary scope of work subject to qualifications, experience, and track record of the subcontractor(s) and overall project budget.

IN WITNESS WHEREOF, the parties have caused their duly authorized officers to execute this Agreement effective as of the date first above written.

Town of Chino Valley, AZ

Climatec, LLC

Signature

Signature

Print Name

Print Name

Title

Title

Date

Date

Approved As To Form

Town Attorney

Attachment “A”

Scope of Work

Chino Valley Municipal Court

Controls

- * Replace existing thermostats and control system with new networked thermostats. New thermostat will provide remote control, scheduling, and alert capabilities for temperature control. Networked thermostats will utilize existing WiFi network to interface with the server and existing thermostat wire to control HVAC equipment.

Lighting

- * Retrofit existing interior standard efficiency T12 and incandescent lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Install ceiling mounted occupancy sensors in appropriate locations to automatically turn off the lighting system in a space when it is not being used. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Chino Valley Public Library

Controls

- * Replace existing thermostats and control system with new networked thermostats. New thermostat will provide remote control, scheduling, and alert capabilities for temperature control. Networked thermostats will utilize existing WiFi network to interface with the server and existing thermostat wire to control HVAC equipment.

Lighting

- * Retrofit existing standard efficiency T8, T12, and incandescent lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing pole and building mounted HID, compact fluorescent (CFL) and incandescent lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Install ceiling mounted occupancy sensors in appropriate locations to automatically turn off the lighting system in a space when it is not being used. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Mechanical

- * Replace (4) packaged gas/electric air conditioning units with new high efficiency units of similar size and capacity. Units will be installed with factory economizers. The scope includes installation of the new units, duct/curb modifications, disconnection/reconnection of the existing electrical and gas lines, condensate connections, control connections, and start-up/testing of the new units. Please see the mechanical replacement inventory for specific locations.
- * Replace (1) split system-gas furnace air conditioning unit with new high efficiency units of similar size and capacity. The scope includes installation of the new unit, duct modifications, disconnection/reconnection of the existing electrical and gas line, condensate connection, control connection, and start-up/testing of the new unit. Please see the mechanical replacement inventory for specific location.
- * Replace (1) packaged heat pump air conditioning unit with new high efficiency units of similar size and capacity. Units will be installed with factory economizers. The scope includes installation of the new unit, duct/curb modifications, disconnection/reconnection of the existing electrical line, condensate connection, control connection, and start-up/testing of the new unit. Please see the mechanical replacement inventory for specific location.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Aquatic Center / Ball Field Concessions

Controls

- * Install “push to run” controls on the heating and cooling systems in air conditioned areas. These controls shall allow the HVAC systems to operate for a programmed period under thermostatic control while limiting set-point adjustment and after hour operations.

Lighting

- * Retrofit existing standard efficiency T8 and compact fluorescent (CFL) lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building and pole mounted HID and compact fluorescent (CFL) lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Re-locate (6) poles in the ball field outfield to the nearest sideline or to the outfield fence limits as requested by the owner. Scope will include:
 - o Remove and re-install poles, fixture boom, light fixtures and ballasts. All moved fixtures shall be re-lamped and fixtures shall be redirected to the limits of the existing booms. Fixtures may be deleted if requested
 - o Underground electrical conduits shall be re-routed and new wire pulled as required. No junction boxes shall remain in the field of play
 - o All disrupted soil will be replaced and compacted. Sprinkler lines damaged by the trenching shall be repaired. Sod will not be repaired/replaced.

- Modify existing as-built drawings to show new conduit runs. No changes to load, circuiting, controls or breakers.
- The holes for the 6 relocated poles shall be drilled by Arizona Public Service (APS) utility to the same depth as the existing.
- Permitting and engineering are not included for pole installation, electrical, structural or soils.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Public Works Development Services

Controls

- * Replace existing thermostats and control system with new networked thermostats. New thermostat will provide remote control, scheduling, and alert capabilities for temperature control. Networked thermostats will utilize existing WiFi network to interface with the server and existing thermostat wire to control HVAC equipment.

Lighting

- * Retrofit existing standard efficiency T8, T12, and incandescent lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted HID and compact fluorescent (CFL) lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Senior Center

Controls

- * Replace existing thermostats and control system with new networked thermostats. New thermostat will provide remote control, scheduling, and alert capabilities for temperature control. Networked thermostats will utilize existing WiFi network to interface with the server and existing thermostat wire to control HVAC equipment.

Lighting

- * Retrofit existing standard efficiency T12, compact fluorescent (CFL), and incandescent lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted HID and incandescent lighting systems with high efficiency LED lighting systems that provide exceptional light quality, long life and instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Animal Control

Controls

- * Install “push to run” controls on the heating and cooling systems in air conditioned areas. These controls shall allow the HVAC systems to operate for a programmed period under thermostatic control while limiting set-point adjustment and after hour operations.

Lighting

- * Retrofit existing standard efficiency T12 lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Town Hall

Controls

- * Replace existing thermostats and control system with new networked thermostats. New thermostat will provide remote control, scheduling, and alert capabilities for temperature control. Networked thermostats will utilize existing WiFi network to interface with the server and existing thermostat wire to control HVAC equipment.

Lighting

- * Retrofit existing standard efficiency T8 and compact fluorescent (CFL) lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing pole and building mounted HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Install ceiling mounted occupancy sensors in appropriate locations to automatically turn off the lighting system in a space when it is not being used. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Shop Building / Police Department Mobile

Controls

- * Install “push to run” controls on the heating and cooling systems in air conditioned areas. These controls shall allow the HVAC systems to operate for a programmed period under thermostatic control while limiting set-point adjustment and after hour operations.

Lighting

- * Retrofit existing standard efficiency T12 and incandescent lighting systems with new LED lighting systems. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted HID and incandescent lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Chino Valley Police Department

Controls

- * Replace existing thermostats and control system with new networked thermostats. New thermostat will provide remote control, scheduling, and alert capabilities for temperature control. Networked thermostats will utilize existing WiFi network to interface with the server and existing thermostat wire to control HVAC equipment.

Lighting

- * Retrofit existing standard efficiency T8, T12, and incandescent lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted HID and incandescent lighting systems with high efficiency LED lighting systems that instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Install ceiling mounted occupancy sensors in appropriate locations to automatically turn off the lighting system in a space when it is not being used. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Mechanical

- * Replace (1) packaged gas/electric air conditioning unit with new high efficiency units of similar size and capacity. The scope includes installation of the new unit, duct/curb modifications, disconnection/reconnection of the existing electrical and gas lines, condensate connection, control connection, and start-up/testing of the new unit. Please see the mechanical replacement inventory for specific locations.
- * Replace (1) split system-gas furnace air conditioning unit with new high efficiency units of similar size and capacity. The scope includes installation of the new unit, duct modifications, disconnection/reconnection of the existing electrical and gas line, condensate connection, control

connection, and start-up/testing of the new unit. Please see the mechanical replacement inventory for specific location.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Old Food Bank Building

Controls

- * Install “push to run” controls on the heating and cooling systems in air conditioned areas. These controls shall allow the HVAC systems to operate for a programmed period under thermostatic control while limiting set-point adjustment and after hour operations.

Lighting

- * Retrofit existing standard efficiency T12 and incandescent lighting systems with new LED lighting systems provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted incandescent lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Community Center

Controls

- * Install “push to run” controls on the heating and cooling systems in air conditioned areas. These controls shall allow the HVAC systems to operate for a programmed period under thermostatic control while limiting set-point adjustment and after hour operations.

Lighting

- * Retrofit existing standard efficiency T8 lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building and pole mounted HID and compact fluorescent (CFL) lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

ParksLighting

- * Retrofit existing standard efficiency T12 lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building and pole mounted HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Roads Department BuildingControls

- * Install “push to run” controls on the heating and cooling systems in air conditioned areas. These controls shall allow the HVAC systems to operate for a programmed period under thermostatic control while limiting set-point adjustment and after hour operations.

Lighting

- * Retrofit existing standard efficiency T12 and incandescent lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building and pole mounted HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Bright StarLighting

- * Retrofit existing standard efficiency T8 lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations
- * Replace existing building mounted HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Waste Water Treatment Plant

Lighting

- * Retrofit existing standard efficiency T12 and incandescent lighting systems with new LED lighting systems which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace existing building mounted HID, T12, and incandescent lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Country West

Lighting

- * Retrofit existing standard efficiency T8 lighting systems to the latest generation of T8 lamps with electronic ballasts which will provide longer lamp life. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.
- * Replace wall mounted HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Street Lights / Traffic Signals

Lighting

- * Replace security and roadway traffic signal HID lighting systems with high efficiency LED lighting systems that provide instant start capability. Please see the Lighting Room by Room in the Technical Appendix for detailed information on lighting scope, quantities, and locations.

Misc.

- * Evaluate rate schedule for each of the sites utility meters. These rates are evaluated to ensure that each meter is on the most cost effective rate plan.

Attachment “B”

Lighting Summary

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Animal Control - 1950 Voss Dr, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Main Building

1st Floor

Rf#-1 Rm - entry office area	1x4x 2L sm strip, F40T12 34w, magnetic ballast	2	59	0.118	2,200	260	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,200	82	0.0806	177
Rf#-2 Rm - kennel area	1x4x 2L sm strip, F40T12 34w, magnetic ballast	9	72	0.648	2,200	1,426	9	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.168	2,200	371	0.4795	1,055
Rf#-3 Rm - office #2	1x4x 2L sm strip, F40T12 34w, magnetic ballast	4	72	0.288	2,200	634	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.075	2,200	165	0.2131	469
Rf#-4 Rm - ext-building mounted	HPS 1L wm wall pack FCO, HPS 150w, HID ballast	1	195	0.195	4,380	854	1	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.165	723

Qty and kW for Animal Control :

16

1.2

16

0.3

0.9

kWh for Animal Control :

3,173

749

2,424

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Bright Star Pumps / Wells -

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Water Campus

1st Floor

Rf#-2 Rm - main room	1x4x 2L sm vapor tight, F32T8 32w, electronic ballast	6	59	0.354	800	283	6	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballast/driver	19	0.112	800	90	0.2417	193
Rf#-3 Rm - ext-building mounted	Inc. 2L par flood, Inc. 90w P38, n/a	1	180	0.18	4,380	788	1	NL030/wp/ft - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.15	657
Rf#-4 Rm - ext-building mounted	HPS 1L wm wall pack FT, HPS 100w, HID ballast	2	130	0.26	4,380	1,139	2	NL030/wp/ft - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.06	4,380	263	0.2	876

Building/Area: Yavapai Well

1st Floor

Rf#-1 Rm - ext building mount	HPS 1L wm wall pack FCO, HPS 70w, HID ballast	1	95	0.095	4,380	416	1	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.065	285
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Qty and kW for Bright Star Pumps / Wells :	10	0.9	10	0.2	0.7
kWh for Bright Star Pumps / Wells :			2,627		615 2,011

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Cameron Property (Paulden) - vacant - 2440 N Troy Lane, Paulden, AZ 86334

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: All Buildings

1st Floor

Rf#-1 Rm - All Interior Space	DND (do not do, left as is), n/a, n/a		0	0	1,500	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	1,500	0	0	0
Rf#-2 Rm - All Exterior Space	DND (do not do, left as is), n/a, n/a		0	0	4,380	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	4,380	0	0	0

Qty and kW for Cameron Property (Paulden) - vacant : 0.0 0.0 0.0

kWh for Cameron Property (Paulden) - vacant :

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Community Center - 1527 N Road 1 East, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - entry area	1x4x 3L sm box, F32T8 32w, electronic ballast	20	90	1.8	1,500	2,700	20	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.562	1,500	842	1.2384	1,858
Rf#-2 Rm - Restroom	1x4x 2L sm wp, F32T8 32w, electronic ballast	2	59	0.118	800	94	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	800	30	0.0806	64
Rf#-3 Rm - custodial closet	1x4x 2L sm wp, F32T8 32w, electronic ballast	3	59	0.177	300	53	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	300	17	0.1208	36
Rf#-4 Rm - hallway	1x4x 2L sm wp, F32T8 32w, electronic ballast	3	59	0.177	1,500	266	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	1,500	84	0.1208	181
Rf#-5 Rm - Office #1	1x4x 3L sm box, F32T8 32w, electronic ballast	2	90	0.18	1,500	270	2	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.056	1,500	84	0.1238	186
Rf#-6 Rm - Office #2	1x4x 3L sm box, F32T8 32w, electronic ballast	2	90	0.18	1,500	270	2	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.056	1,500	84	0.1238	186
Rf#-7 Rm - Office #3	1x4x 3L sm box, F32T8 32w, electronic ballast	2	90	0.18	1,500	270	2	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.056	1,500	84	0.1238	186
Rf#-8 Rm - M RR	1x4x 3L sm box, F32T8 32w, electronic ballast	1	90	0.09	800	72	1	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.028	800	22	0.0619	50
Rf#-9 Rm - W RR	1x4x 3L sm box, F32T8 32w, electronic ballast	1	90	0.09	800	72	1	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.028	800	22	0.0619	50
Rf#-10 Rm - closet	1x4x 2L sm wp, F32T8 32w, electronic ballast	2	59	0.118	300	35	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	300	11	0.0806	24
Rf#-11 Rm - kitchen	1x4x 2L sm wp, F32T8 32w, electronic ballast	3	59	0.177	800	142	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	800	45	0.1208	97
Rf#-12 Rm - Open Area #2	1x4x 3L sm box, F32T8 32w, electronic ballast	12	90	1.08	1,500	1,620	12	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.337	1,500	505	0.7430	1,115
Rf#-13 Rm - Open Area #2	1x4x 2L sm wp, F32T8 32w, electronic ballast	1	59	0.059	1,500	89	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	1,500	28	0.0403	60
Rf#-14 Rm - back storage area	2x4x 3L rec trf, F32T8 32w, electronic ballast	4	90	0.36	800	288	4	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.112	800	90	0.2477	198
Rf#-15 Rm - office	1x4x 3L sm box, F32T8 32w, electronic ballast	2	90	0.18	1,500	270	2	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.056	1,500	84	0.1238	186
Rf#-16 Rm - electrical	1x4x 2L sm strip, F32T8 32w, electronic ballast	1	59	0.059	300	18	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	300	6	0.0403	12
Rf#-17 Rm - ext-building mounted	CF 1L rec can, CF 18w, CFL ballast	14	20	0.28	4,380	1,226	14	RL091/ckit - (1) recessed can kit, LED 9w, new trim face, 50,000 hour+ rated life at L70	8	0.119	4,380	521	0.161	705
Rf#-18 Rm - ext-pole mounted	HPS 1L shoe box, RdP, DB, 2SH, HPS 150w, HID ballast	1	195	0.195	4,380	854	1	NL054/p/s - New area light pole or bldg mnt 54w, 100,000+ hour rated life at L70, on board occ sensor	54	0.054	4,380	237	0.141	618

Qty and kW for Community Center :

76

5.5

76

1.7

3.8

kWh for Community Center :

8,609

2,796

5,812

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Country West Pumps / Wells - 853 N. Highway 89, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Bldg 1

1st Floor

Rf#-1 Rm - main room	1x4x 2L sm wp, F32T8 32w, electronic ballast	4	59	0.236	300	71	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		19	0.075	300	22	0.1611	48
Rf#-2 Rm - ext-building mount	HPS 1L wm wall pack FCO, HPS 100w, HID ballast	1	130	0.13	4,380	569	1	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w		30	0.03	4,380	131	0.1	438

Building/Area: Bldg 2

1st Floor

Rf#-3 Rm - main room	1x4x 2L sm wp, F32T8 32w, electronic ballast	4	59	0.236	300	71	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		19	0.075	300	22	0.1611	48
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Qty and kW for Country West Pumps / Wells :	9	0.6	9	0.2	0.4
kWh for Country West Pumps / Wells :	711			175	534

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Court Building - 1985 N Road 1 West, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - Entry hallway	2x4x 4L rec trf, F40T12 34w, magnetic ballast	11	144	1.584	1,500	2,376	11	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.309	1,500	463	1.2751	1,913
Rf#-2 Rm - court room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	12	144	1.728	1,500	2,592	12	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70	36	0.432	1,500	648	1.296	1,944
Rf#-3 Rm - M RR	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-4 Rm - W RR	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-5 Rm - clerk of the court	2x4x 4L rec trf, F40T12 34w, magnetic ballast	8	144	1.152	1,500	1,728	8	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.225	1,275	286	0.9274	1,442
Rf#-6 Rm - Conference Room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-7 Rm - Office #1	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-8 Rm - Restroom	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	500	30	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	500	5	0.051	26
Rf#-9 Rm - Office #2	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-10 Rm - Office #3	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-11 Rm - Office #4	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-12 Rm - Office #5	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-13 Rm - Office #6	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-14 Rm - file room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-15 Rm - Office #7	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-16 Rm - ext-building mounted	HPS 1L wm wall pack small, HPS 70w, HID ballast	4	95	0.38	1,460	555	4	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.12	1,460	175	0.26	380
Rf#-17 Rm - ext-building mounted	HPS 1L wm wall pack PCO, HPS 70w, HID ballast	1	95	0.095	1,460	139	1	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	1,460	44	0.065	95
Rf#-18 Rm - ext-building mounted	QH 1L flood, knuckle, QH 300w, n/a	1	300	0.3	1,460	438	1	NL019/fld - New LED flood mounted, 50,000 hour L70 rated life, 19w	19	0.019	1,460	28	0.281	410
Qty and kW for Court Building :		60		8.5		60				1.8			6.7	
kWh for Court Building :						12,610							2,573	10,038

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Library - 1020 W Palomino Rd., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - main room right	1x4x 4L sm box, F40T12 34w, magnetic ballast	26	144	3.744	2,500	9,360	26	NF331/4w - New 4' wrap w/3 LED T8 12w lamps, (1) 3L LP electronic ballast	28	0.730	2,500	1,825	3.0139	7,535
Rf#-2 Rm - reading room	1x4x 2L sm wp, F40T12 34w, magnetic ballast	15	72	1.08	2,500	2,700	15	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.281	2,500	702	0.7992	1,998
Rf#-3 Rm - Office #1	1x4x 2L sm wp, F40T12 34w, magnetic ballast	2	72	0.144	1,800	259	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	1,800	67	0.1066	192
Rf#-4 Rm - main room left side	2x4x 4L rec trf, F40T12 34w, magnetic ballast	16	144	2.304	2,200	5,069	16	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.449	2,200	988	1.8547	4,080
Rf#-5 Rm - RR Lobby	2x4x 4L rec trf, F40T12 34w, magnetic ballast	1	144	0.144	2,200	317	1	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.028	2,200	62	0.1159	255
Rf#-6 Rm - M RR	1x4x 4L sm wp, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	NF331/4w - New 4' wrap w/3 LED T8 12w lamps, (1) 3L LP electronic ballast	28	0.056	1,500	84	0.2318	348
Rf#-7 Rm - W RR	1x4x 4L sm wp, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	NF331/4w - New 4' wrap w/3 LED T8 12w lamps, (1) 3L LP electronic ballast	28	0.056	1,500	84	0.2318	348
Rf#-8 Rm - Staff Only Book room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	7	144	1.008	2,200	2,218	7	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.197	1,870	368	0.8114	1,850
Rf#-9 Rm - Office #1	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,800	518	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,800	101	0.2318	417
Rf#-10 Rm - Child Area entry	1x4x 4L sm wp, F40T12 34w, magnetic ballast	3	144	0.432	2,200	950	3	NF331/4w - New 4' wrap w/3 LED T8 12w lamps, (1) 3L LP electronic ballast	28	0.084	2,200	185	0.3478	765
Rf#-11 Rm - Child Area open space	1x4x 4L sm wp, F40T12 34w, magnetic ballast	12	144	1.728	2,200	3,802	12	NF331/4w - New 4' wrap w/3 LED T8 12w lamps, (1) 3L LP electronic ballast	28	0.337	2,200	741	1.3910	3,060
Rf#-12 Rm - New space open area #1	2x4x 4L rec trf, F32T8 32w, electronic ballast	6	112	0.672	2,200	1,478	6	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.168	1,870	315	0.5035	1,163
Rf#-13 Rm - New Space RR hallway	Inc. 1L rec can, Inc. 50w R20, n/a	3	50	0.15	2,200	330	3	RL091/ckit - (1) recessed can kit, LED 9w, new trim face, 50,000 hour+ rated life at L70	8	0.026	2,200	56	0.1245	274
Rf#-14 Rm - New Space W RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	2	59	0.118	500	59	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	500	19	0.0806	40
Rf#-15 Rm - New Space W RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	2	59	0.118	500	59	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	500	19	0.0806	40
Rf#-16 Rm - New space open area #2	2x4x 4L rec trf, F32T8 32w, electronic ballast	8	112	0.896	2,200	1,971	8	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.225	1,870	420	0.6714	1,551
Rf#-17 Rm - New space open area #3	1x4x 2L pm ind/dir, F32T8 32w, electronic ballast	12	59	0.708	2,200	1,558	12	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.225	1,870	420	0.4834	1,138
Rf#-18 Rm - New space Conference Room	2x4x 4L rec trf, F32T8 32w, electronic ballast	3	112	0.336	2,200	739	3	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.084	2,200	185	0.2518	554
Rf#-19 Rm - MISGIS entry	1x4x 4L sm wp, F40T12 34w, magnetic ballast	1	144	0.144	1,800	259	1	NF331/4w - New 4' wrap w/3 LED T8 12w lamps, (1) 3L LP electronic ballast	28	0.028	1,800	51	0.1159	209
Rf#-20 Rm - MISGIS office	1x4x 2L sm wp, F40T12 34w, magnetic ballast	2	72	0.144	1,800	259	2	NF331/4w - New 4' wrap w/3 LED T8 12w lamps, (1) 3L LP electronic ballast	28	0.056	1,800	101	0.0878	158
Rf#-21 Rm - ext-building mounted	Inc. 1L wm globe, Inc. 60w A19, n/a	3	60	0.18	4,380	788	3	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w	12	0.036	4,380	158	0.144	631

W* = wall switch sensor; C* = ceiling sensor; E* = existing sensor, L* Dimming Control

Library Lighting Page 7

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Library - 1020 W Palomino Rd., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Rf#-22 Rm - ext-building mounted	HPS 1L wm wall pack small, HPS 70w, HID ballast	1	95	0.095	4,380	416	1	NL030/wp/fc	- New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.065	285
Rf#-23 Rm - ext-pole mounted	HPS 1L cobra head PC, HPS 250w, HID ballast	2	295	0.59	4,380	2,584	2	NL072/p/s	- New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.144	4,380	631	0.446	1,953
Rf#-24 Rm - ext-building mounted	HPS 1L wm wall pack PCO, HPS 100w, HID ballast	4	130	0.52	4,380	2,278	4	NL030/wp/fc	- New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.12	4,380	526	0.4	1,752
Rf#-25 Rm - ext-building mounted (book	HPS 1L sm square drop lens, HPS 100w, HID ballast	1	130	0.13	4,380	569	1	NL030/sq	- New LED surface mounted square, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.1	438
Rf#-26 Rm - ext-building mounted	Inc. 2L can flood, Inc. 60w A19, n/a	3	120	0.36	4,380	1,577	3	NL030/wp/ft	- New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.09	4,380	394	0.27	1,183
Rf#-27 Rm - ext-building mounted (south	CF 1L rec square, CF 15w, CFL ballast	5	15	0.075	4,380	329	5	NL030/sq	- New LED surface mounted square, 50,000 hour L70 rated life, 30w	30	0.15	4,380	657	-0.075	-328
Qty and kW for Library :		146		16.7			146				3.8			12.9	
kWh for Library :						41,311							9,421		31,889

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Old Food Bank Bldg - did PD take over? - 1943 Voss Dr., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Main Building

1st Floor

Rf#-1 Rm - entry area	1x4x 2L sm wp, F40T12 34w, magnetic ballast	2	72	0.144	800	115	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	800	30	0.1066	85
Rf#-2 Rm - Garage bay #1	1x4x 2L sm wp, F40T12 34w, magnetic ballast	4	72	0.288	800	230	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.075	800	60	0.2131	170
Rf#-3 Rm - RR #1	Inc. 1L sm dome, Inc. 60w A19, n/a	2	60	0.12	500	60	2	RL091/s - (1) LED 9w A19 screw in lamp	9	0.018	500	9	0.102	51
Rf#-4 Rm - RR #2	Inc. 1L sm dome, Inc. 60w A19, n/a	2	60	0.12	500	60	2	RL091/s - (1) LED 9w A19 screw in lamp	9	0.018	500	9	0.102	51
Rf#-5 Rm - Garage bay #2	1x4x 2L sm wp, F40T12 34w, magnetic ballast	4	72	0.288	800	230	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.075	800	60	0.2131	170
Rf#-6 Rm - ext-building mounted	Inc. 1L wm lantern, Inc. 60w A19, n/a	3	60	0.18	4,380	788	3	RL091/s - (1) LED 9w A19 screw in lamp	9	0.027	4,380	118	0.153	670

y and kW for Old Food Bank Bldg - did PD take over? :	17	1.1	17	0.3	0.9
kWh for Old Food Bank Bldg - did PD take over? :	1,484	286	1,197		

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Other Pumps / Wells -

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: All Buildings

1st Floor

Rf#-1 Rm - All Interior Space	DND (do not do, left as is), n/a, n/a		0	0	1,500	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	1,500	0	0	0
Rf#-2 Rm - All Exterior Space	DND (do not do, left as is), n/a, n/a		0	0	4,380	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	4,380	0	0	0

Qty and kW for Other Pumps / Wells :

0.0

0.0

0.0

kWh for Other Pumps / Wells :

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Parks -

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Memory Park

1st Floor

Rf#-1 Rm - M RR	1x4x 2L sm strip, F40T12 34w, magnetic ballast	1	72	0.072	2,000	144	1	NL040/4vt - New 4' vapor tight w/2 LED T8 12w lamps, (1) 2L LP electronic ballast	19	0.019	2,000	37	0.0533	107
Rf#-2 Rm - W RR	1x4x 2L sm strip, F40T12 34w, magnetic ballast	1	72	0.072	2,000	144	1	NL040/4vt - New 4' vapor tight w/2 LED T8 12w lamps, (1) 2L LP electronic ballast	19	0.019	2,000	37	0.0533	107
Rf#-3 Rm - ext-building mounted (canopy)	HPS 1L sm square, HPS 100w, HID ballast	2	130	0.26	4,380	1,139	2	NL030/sq - New LED surface mounted square, 50,000 hour L70 rated life, 30w	30	0.06	4,380	263	0.2	876
Rf#-4 Rm - ext-building mounted (canopy)	HPS 1L wm wall pack PCO, HPS 100w, HID ballast	5	130	0.65	4,380	2,847	5	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.15	4,380	657	0.5	2,190

Qty and kW for Parks :

9

1.1

9

0.2

0.8

kWh for Parks :

4,274

994

3,280

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Police Department - 1950 Voss Dr, Bldg #301, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - main entry	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	3,500	1,008	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	3,500	197	0.2318	811
Rf#-2 Rm - Office #1	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	2,500	720	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	2,500	140	0.2318	580
Rf#-3 Rm - Office #2	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	2,500	720	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	2,500	140	0.2318	580
Rf#-4 Rm - Office #3	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	2,500	720	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	2,500	140	0.2318	580
Rf#-5 Rm - Office #4	2x4x 4L rec trf, F40T12 34w, magnetic ballast	1	144	0.144	2,500	360	1	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.028	2,500	70	0.1159	290
Rf#-6 Rm - Office #5	2x4x 4L rec trf, F40T12 34w, magnetic ballast	4	144	0.576	2,500	1,440	4	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.112	2,500	281	0.4637	1,159
Rf#-7 Rm - Conference room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,800	518	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,800	101	0.2318	417
Rf#-8 Rm - small break room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,800	518	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,800	101	0.2318	417
Rf#-9 Rm - large open area	2x4x 4L rec trf, F40T12 34w, magnetic ballast	10	144	1.44	3,500	5,040	10	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.281	2,975	835	1.1592	4,205
Rf#-10 Rm - Office #6	2x4x 4L rec trf, F40T12 34w, magnetic ballast	5	144	0.72	2,500	1,800	5	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.140	2,500	351	0.5796	1,449
Rf#-11 Rm - armory	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	800	230	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	800	45	0.2318	185
Rf#-12 Rm - Cell's vestibule area	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	300	86	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	300	17	0.2318	70
Rf#-13 Rm - Cell #1	Inc. 2L sm square 12", Inc. 60w A19, n/a	1	120	0.12	300	36	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	300	3	0.111	33
Rf#-14 Rm - Cell #2	Inc. 2L sm square 12", Inc. 60w A19, n/a	1	120	0.12	300	36	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	300	3	0.111	33
Rf#-15 Rm - break room/RR hallway	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-16 Rm - break room/RR hallway	2x4x 4L rec trf, F32T8 32w, electronic ballast	1	112	0.112	1,500	168	1	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.028	1,500	42	0.0839	126
Rf#-17 Rm - M RR	1x2x 2L wm vanity, F20T12 20w, magnetic ballast	1	50	0.05	500	25	1	RLT82(2) - (2) LED 2' T8 lamp 8w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	12	0.012	500	6	0.0375	19
Rf#-18 Rm - W RR	1x2x 2L wm vanity, F20T12 20w, magnetic ballast	1	50	0.05	500	25	1	RLT82(2) - (2) LED 2' T8 lamp 8w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	12	0.012	500	6	0.0375	19
Rf#-19 Rm - reception area	Inc. 1L track light, Inc. 60w A19, n/a	7	60	0.42	8,760	3,679	7	RL091/s - (1) LED 9w A19 screw in lamp	9	0.063	8,760	552	0.357	3,127
Rf#-20 Rm - reception area	CF 1L track light, CF 15w, CFL ballast	7	15	0.105	8,760	920	7	RL091/s - (1) LED 9w A19 screw in lamp	9	0.063	8,760	552	0.042	368
Rf#-21 Rm - ext-building mounted	HPS 1L wm wall pack PCO, HPS 100w, HID ballast	1	130	0.13	4,380	569	1	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.1	438

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Police Department - 1950 Voss Dr, Bldg #301, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Rf#-22 Rm - ext-building mounted	HPS 1L wm wall pack FT, HPS 150w, HID ballast	1	195	0.195	4,380	854	1	NL030/wp/ft - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.165	723
Rf#-23 Rm - ext-building mounted	Inc. 1L jelly jar, Inc. 60w A19, n/a	2	60	0.12	4,380	526	2	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w	12	0.024	4,380	105	0.096	420
Rf#-24 Rm - ext-pole mounted	HPS 1L cobra head PC, HPS 250w, HID ballast	3	295	0.885	4,380	3,876	3	NL072/p/s - New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.216	4,380	946	0.669	2,930
Rf#-25 Rm - ext-pole mounted	HPS 1L shoe box, SqP, DB, 2SH, HPS 250w, HID ballast	2	295	0.59	4,380	2,584	2	NL072/p/s - New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.144	4,380	631	0.446	1,953
Qty and kW for Police Department :		66		8.4		66				1.7			6.7	
kWh for Police Department :						26,892						5,610		21,280

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Other Pumps / Wells -

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: All Buildings

1st Floor

Rf#-1 Rm - All Interior Space	DND (do not do, left as is), n/a, n/a		0	0	1,500	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	1,500	0	0	0
Rf#-2 Rm - All Exterior Space	DND (do not do, left as is), n/a, n/a		0	0	4,380	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	4,380	0	0	0

Qty and kW for Other Pumps / Wells : 0.0 0.0 0.0

kWh for Other Pumps / Wells :

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Parks -

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Memory Park

1st Floor

Rf#-1 Rm - M RR	1x4x 2L sm strip, F40T12 34w, magnetic ballast	1	72	0.072	2,000	144	1	NL040/4vt	- New 4' vapor tight w/2 LED T8 12w lamps, (1) 2L LP electronic ballast	19	0.019	2,000	37	0.0533	107
Rf#-2 Rm - W RR	1x4x 2L sm strip, F40T12 34w, magnetic ballast	1	72	0.072	2,000	144	1	NL040/4vt	- New 4' vapor tight w/2 LED T8 12w lamps, (1) 2L LP electronic ballast	19	0.019	2,000	37	0.0533	107
Rf#-3 Rm - ext-building mounted (canopy)	HPS 1L sm square, HPS 100w, HID ballast	2	130	0.26	4,380	1,139	2	NL030/sq	- New LED surface mounted square, 50,000 hour L70 rated life, 30w	30	0.06	4,380	263	0.2	876
Rf#-4 Rm - ext-building mounted (canopy)	HPS 1L wm wall pack PCO, HPS 100w, HID ballast	5	130	0.65	4,380	2,847	5	NL030/wp/fc	- New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.15	4,380	657	0.5	2,190

Qty and kW for Parks :

9

1.1

9

0.2

0.8

kWh for Parks :

4,274

994

3,280

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Police Department - 1950 Voss Dr, Bldg #301, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - main entry	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	3,500	1,008	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	3,500	197	0.2318	811
Rf#-2 Rm - Office #1	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	2,500	720	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	2,500	140	0.2318	580
Rf#-3 Rm - Office #2	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	2,500	720	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	2,500	140	0.2318	580
Rf#-4 Rm - Office #3	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	2,500	720	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	2,500	140	0.2318	580
Rf#-5 Rm - Office #4	2x4x 4L rec trf, F40T12 34w, magnetic ballast	1	144	0.144	2,500	360	1	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.028	2,500	70	0.1159	290
Rf#-6 Rm - Office #5	2x4x 4L rec trf, F40T12 34w, magnetic ballast	4	144	0.576	2,500	1,440	4	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.112	2,500	281	0.4637	1,159
Rf#-7 Rm - Conference room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,800	518	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,800	101	0.2318	417
Rf#-8 Rm - small break room	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,800	518	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,800	101	0.2318	417
Rf#-9 Rm - large open area	2x4x 4L rec trf, F40T12 34w, magnetic ballast	10	144	1.44	3,500	5,040	10	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.281	2,975	835	1.1592	4,205
Rf#-10 Rm - Office #6	2x4x 4L rec trf, F40T12 34w, magnetic ballast	5	144	0.72	2,500	1,800	5	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.140	2,500	351	0.5796	1,449
Rf#-11 Rm - armory	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	800	230	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	800	45	0.2318	185
Rf#-12 Rm - Cell's vestibule area	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	300	86	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	300	17	0.2318	70
Rf#-13 Rm - Cell #1	Inc. 2L sm square 12", Inc. 60w A19, n/a	1	120	0.12	300	36	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	300	3	0.111	33
Rf#-14 Rm - Cell #2	Inc. 2L sm square 12", Inc. 60w A19, n/a	1	120	0.12	300	36	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	300	3	0.111	33
Rf#-15 Rm - break room/RR hallway	2x4x 4L rec trf, F40T12 34w, magnetic ballast	2	144	0.288	1,500	432	2	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.056	1,500	84	0.2318	348
Rf#-16 Rm - break room/RR hallway	2x4x 4L rec trf, F32T8 32w, electronic ballast	1	112	0.112	1,500	168	1	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.028	1,500	42	0.0839	126
Rf#-17 Rm - M RR	1x2x 2L wm vanity, F20T12 20w, magnetic ballast	1	50	0.05	500	25	1	RLT82(2) - (2) LED 2' T8 lamp 8w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	12	0.012	500	6	0.0375	19
Rf#-18 Rm - W RR	1x2x 2L wm vanity, F20T12 20w, magnetic ballast	1	50	0.05	500	25	1	RLT82(2) - (2) LED 2' T8 lamp 8w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	12	0.012	500	6	0.0375	19
Rf#-19 Rm - reception area	Inc. 1L track light, Inc. 60w A19, n/a	7	60	0.42	8,760	3,679	7	RL091/s - (1) LED 9w A19 screw in lamp	9	0.063	8,760	552	0.357	3,127
Rf#-20 Rm - reception area	CF 1L track light, CF 15w, CFL ballast	7	15	0.105	8,760	920	7	RL091/s - (1) LED 9w A19 screw in lamp	9	0.063	8,760	552	0.042	368
Rf#-21 Rm - ext-building mounted	HPS 1L wm wall pack PCO, HPS 100w, HID ballast	1	130	0.13	4,380	569	1	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.1	438

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Police Department - 1950 Voss Dr, Bldg #301, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Rf#-22 Rm - ext-building mounted	HPS 1L wm wall pack FT, HPS 150w, HID ballast	1	195	0.195	4,380	854	1	NL030/wp/ft - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.03	4,380	131	0.165	723
Rf#-23 Rm - ext-building mounted	Inc. 1L jelly jar, Inc. 60w A19, n/a	2	60	0.12	4,380	526	2	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w	12	0.024	4,380	105	0.096	420
Rf#-24 Rm - ext-pole mounted	HPS 1L cobra head PC, HPS 250w, HID ballast	3	295	0.885	4,380	3,876	3	NL072/p/s - New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.216	4,380	946	0.669	2,930
Rf#-25 Rm - ext-pole mounted	HPS 1L shoe box, SqP, DB, 2SH, HPS 250w, HID ballast	2	295	0.59	4,380	2,584	2	NL072/p/s - New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.144	4,380	631	0.446	1,953

Qty and kW for Police Department :	66	8.4	66	1.7	6.7
kWh for Police Department :		26,892		5,610	21,280

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Police Dept - Shooting Range - confirm - 2178 Sgt Dee Barnes Way Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: All Buildings

1st Floor

Rf#-1 Rm - All Interior Space	DND (do not do, left as is), n/a, n/a		0	0	1,500	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	1,500	0	0	0
Rf#-2 Rm - All Exterior Space	DND (do not do, left as is), n/a, n/a		0	0	4,380	0	0	DND -	DND: (do not do, fixtures left as is)	0	0	4,380	0	0	0

ty and kW for Police Dept - Shooting Range - confirm : 0.0

kWh for Police Dept - Shooting Range - confirm :

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Pool - Aquatics Bldg & Ball Fields - 1615 N Road 1 East, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Concessions

1st Floor

Rf#-24 Rm - Kitchen	1x4x 2L sm wp, F32T8 32w, electronic ballast	9	59	0.531	1,200	637	9	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.168	1,200	202	0.3625	435
Rf#-25 Rm - M RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	6	59	0.354	500	177	6	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.112	500	56	0.2417	121
Rf#-26 Rm - W RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	6	59	0.354	500	177	6	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.112	500	56	0.2417	121
Rf#-27 Rm - equipment room	1x4x 2L sm wp, F32T8 32w, electronic ballast	1	59	0.059	300	18	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	300	6	0.0403	12
Rf#-28 Rm - 2nd Floor viewing area	1x4x 2L rec trf, F32T8 32w, electronic ballast	12	59	0.708	1,500	1,062	12	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.225	1,500	337	0.4834	725
Rf#-29 Rm - ext-building mounted	CF 1L wm wall pack FCO, CF 32w, CFL ballast	35	0	4,380	0	0	0	RL0131/hh - (1) New LED 4 pin 13w lamp, 50,000 hour rated life at L70, (1) new CFL/LED driver	13	0	4,380	0	0	0
Rf#-30 Rm - ext-pole mounted (to and away)	HPS 1L post top lantern, HPS 150w, HID ballast	15	195	2.925	4,380	12,812	15	RL036/s/tg - (1) LED 36w screw in lamp 120/277v, 50,000 hour rated life at L70	36	0.54	4,380	2,365	2.385	10,446

Building/Area: Main Building

1st Floor

Rf#-1 Rm - entry area	CFL 1L pm can, CF 32w, CFL ballast	4	35	0.14	1,500	210	4	RL0131/hv - (1) New LED 4 pin 13w lamp, 50,000 hour rated life at L70, (1) new CFL/LED driver	13	0.052	1,500	78	0.088	132
Rf#-2 Rm - M RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	1	59	0.059	1,200	71	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	1,200	22	0.0403	48
Rf#-3 Rm - W RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	1	59	0.059	1,200	71	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	1,200	22	0.0403	48
Rf#-4 Rm - meeting/break room	2x4x 3L rec trf, F32T8 32w, electronic ballast	12	90	1.08	1,500	1,620	12	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.337	1,500	505	0.7430	1,115
Rf#-5 Rm - office	2x4x 3L rec trf, F32T8 32w, electronic ballast	4	90	0.36	1,500	540	4	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.112	1,500	168	0.2477	372
Rf#-6 Rm - Life Guard Office	1x4x 2L sm wp, F32T8 32w, electronic ballast	2	59	0.118	1,500	177	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	1,500	56	0.0806	121
Rf#-7 Rm - Office #1	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	1,500	270	2	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.056	1,500	84	0.1238	186
Rf#-8 Rm - Office #1	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	1,500	270	2	RLT83 - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	28	0.056	1,500	84	0.1238	186
Rf#-9 Rm - Pool viewing room	CFL 1L pm can, CF 32w, CFL ballast	2	35	0.07	1,500	105	2	RL0131/hv - (1) New LED 4 pin 13w lamp, 50,000 hour rated life at L70, (1) new CFL/LED driver	13	0.026	1,500	39	0.044	66
Rf#-10 Rm - hallway to lockers	CF 1L wm oval, CF 32w, CFL ballast	4	35	0.14	1,500	210	4	RL0131/hh - (1) New LED 4 pin 13w lamp, 50,000 hour rated life at L70, (1) new CFL/LED driver	13	0.052	1,500	78	0.088	132
Rf#-11 Rm - M locker room	1x4x 2L sm vapor tight, F32T8 32w, electronic ballast	9	59	0.531	1,200	637	9	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.168	1,200	202	0.3625	435
Rf#-12 Rm - W locker Room	1x4x 2L sm vapor tight, F32T8 32w, electronic ballast	9	59	0.531	1,200	637	9	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.168	1,200	202	0.3625	435

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Pool - Aquatics Bldg & Ball Fields - 1615 N Road 1 East, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Rf#-13 Rm - Family Restroom	1x4x 2L sm vapor tight, F32T8 32w, electronic ballast	1	59	0.059	500	30	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	500	9	0.0403	20
Rf#-14 Rm - equipment room	1x4x 2L sm strip, F32T8 32w, electronic ballast	1	59	0.059	500	30	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	500	9	0.0403	20
Rf#-15 Rm - ext-building mounted (pool)	MH 1L wm shoe box, MH 250w, HID ballast	3	295	0.885	4,380	3,876	3	NL072/p/s - New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.216	4,380	946	0.669	2,930
Rf#-16 Rm - ext-pole mounted (pool area)	MH 1L shoe box, DB, 6SH, MH 250w, HID ballast	6	295	1.77	4,380	7,753	6	NL072/p/s - New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.432	4,380	1,892	1.338	5,860
Rf#-17 Rm - ext-building mounted	CFL 1L fixture, CF 15w, CFL ballast	3	15	0.045	4,380	197	3	RL0131/hh - (1) New LED 4 pin 13w lamp, 50,000 hour rated life at L70, (1) new CFL/LED driver	13	0.039	4,380	171	0.006	26
Rf#-18 Rm - ext-pole mounted (parking lot)	HPS 1L shoe box, RdP DB, 5SH, HPS 100w, HID ballast	5	130	0.65	4,380	2,847	5	NL054/p/s - New area light pole or bldg mnt 54w, 100,000+ hour rated life at L70, on board occ sensor	54	0.27	4,380	1,183	0.38	1,664
Rf#-19 Rm - ext-pole mounted (parking lot)	HPS 1L shoe box, RdP DB, 6DH, HPS 100w, HID ballast	12	130	1.56	4,380	6,833	12	NL054/p/s - New area light pole or bldg mnt 54w, 100,000+ hour rated life at L70, on board occ sensor	54	0.648	4,380	2,838	0.912	3,995

Building/Area: Pool Equipment

1st Floor

Rf#-20 Rm - equipment room	1x4x 2L sm vapor tight, F32T8 32w, electronic ballast	7	59	0.413	500	207	7	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.131	500	66	0.282	141
Rf#-21 Rm - Chemical storage Room #1	1x4x 2L sm vapor tight, F32T8 32w, electronic ballast	1	59	0.059	300	18	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	300	6	0.0403	12
Rf#-22 Rm - Chemical storage Room #2	1x4x 2L sm vapor tight, F32T8 32w, electronic ballast	1	59	0.059	300	18	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	300	6	0.0403	12
Rf#-23 Rm - ext-building mount	MH 1L wm wall pack FCO, MH 175w, HID ballast	2	215	0.43	4,380	1,883	2	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.06	4,380	263	0.37	1,621

Qty and kW for Pool - Aquatics Bldg & Ball Fields :

143

14.4

143

4.2

10.2

kWh for Pool - Aquatics Bldg & Ball Fields :

43,391

11,951

31,437

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Public Works - 1982 Voss Dr., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - main entry	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	1,100	130	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	1,100	41	0.0806	89
Rf#-2 Rm - RR hallway	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,800	330	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,800	105	0.0806	226
Rf#-3 Rm - M RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	2	59	0.118	500	59	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	500	19	0.0806	40
Rf#-4 Rm - W RR	1x4x 2L sm wp, F32T8 32w, electronic ballast	2	59	0.118	500	59	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	500	19	0.0806	40
Rf#-5 Rm - Development Services	2x4x 2L rec trf, F32T8 32w, electronic ballast	13	59	0.767	2,800	2,148	13	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.243	2,800	681	0.5236	1,466
Rf#-6 Rm - Office #1	2x4x 2L rec trf, F32T8 32w, electronic ballast	4	59	0.236	2,150	507	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.075	2,150	161	0.1611	346
Rf#-7 Rm - Office #2	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,150	254	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,150	80	0.0806	173
Rf#-8 Rm - Office #3	2x4x 2L rec trf, F32T8 32w, electronic ballast	4	59	0.236	2,150	507	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.075	2,150	161	0.1611	346
Rf#-9 Rm - Office #4	2x4x 2L rec trf, F32T8 32w, electronic ballast	4	59	0.236	2,150	507	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.075	2,150	161	0.1611	346
Rf#-10 Rm - break room	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,800	330	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,800	105	0.0806	226
Rf#-11 Rm - back hallway	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,800	330	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,800	105	0.0806	226
Rf#-12 Rm - furnace room	Inc. 2L vanity, Inc. 60w A19, n/a	1	120	0.12	800	96	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	800	7	0.111	89
Rf#-13 Rm - furnace room	1x4x 2L sm strip, F40T12 34w, magnetic ballast	1	72	0.072	800	58	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	800	15	0.0533	43
Rf#-14 Rm - Office #5	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,150	254	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,150	80	0.0806	173
Rf#-15 Rm - Office #6	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,150	254	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,150	80	0.0806	173
Rf#-16 Rm - hallway	2x4x 2L rec trf, F32T8 32w, electronic ballast	1	59	0.059	2,800	165	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	2,800	52	0.0403	113
Rf#-17 Rm - hallway	Inc 2L exit sign, Inc. 25w, n/a	3	50	0.15	2,800	420	3	NLX - New LED exit sign with battery backup	2	0.008	2,800	21	0.1425	399
Rf#-18 Rm - Office #7	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,150	254	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,150	80	0.0806	173
Rf#-19 Rm - Office #8	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,150	254	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,150	80	0.0806	173
Rf#-20 Rm - Office #9	2x4x 2L rec trf, F32T8 32w, electronic ballast	2	59	0.118	2,150	254	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,150	80	0.0806	173
Rf#-21 Rm - Utility Bill Counter	2x4x 2L rec trf, F32T8 32w, electronic ballast	3	59	0.177	2,800	496	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	2,800	157	0.1208	338

W* = wall switch sensor; C* = ceiling sensor; E* = existing sensor, L* Dimming Control

Public Works Lighting Page 17

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Public Works - 1982 Voss Dr., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd	
Rf#-22 Rm - ext-building mounted	CF 2L wm square low profile, CF 18w, CFL ballast	6	40	0.24	4,380	1,051	6	RL0132/hh - (2) New LED 4 pin 13w lamp, 50,000 hour rated life at L70, (1) new CFL/LED driver	26	0.156	4,380	683	0.084	368	
Rf#-23 Rm - ext-building mounted	CF 1L rec can, CF 18w, CFL ballast	2	20	0.04	4,380	175	2	RL091/ckit - (1) recessed can kit, LED 9w, new trim face, 50,000 hour+ rated life at L70	8	0.017	4,380	74	0.023	101	
Rf#-24 Rm - ext-building mounted	HPS 1L wm wall pack small, HPS 70w, HID ballast	6	95	0.57	4,380	2,497	6	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.18	4,380	788	0.39	1,708	

Qty and kW for Public Works :	72	4.3	72	1.4	2.9
kWh for Public Works :		11,388		3,835	7,548

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Roads Dept - 2204 Old Home Manor Dr., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Main Building

1st Floor

Rf#-1 Rm - entry area	1x4x 2L sm wp, F40T12 34w, magnetic ballast	3	72	0.216	900	194	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	900	51	0.1598	144
Rf#-2 Rm - break room	Inc. 1L sm dome, Inc. 60w A19, n/a	2	60	0.12	900	108	2	RL091/s - (1) LED 9w A19 screw in lamp	9	0.018	900	16	0.102	92
Rf#-3 Rm - storage	Inc. 1L ceiling fan light, Inc. 60w A19, n/a	3	60	0.18	900	162	3	RL091/s - (1) LED 9w A19 screw in lamp	9	0.027	900	24	0.153	138
Rf#-4 Rm - room with old ice machine	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	900	54	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	900	8	0.051	46
Rf#-5 Rm - Open area	1x4x 2L sm wp, F40T12 34w, magnetic ballast	4	72	0.288	900	259	4	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.075	900	67	0.2131	192
Rf#-6 Rm - Restroom	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	500	30	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	500	5	0.051	26
Rf#-7 Rm - closet	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	900	54	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	900	8	0.051	46
Rf#-8 Rm - Restroom	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	500	30	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	500	5	0.051	26
Rf#-9 Rm - ext-pole mounted	HPS 1L flood, yoke mount (wood pole), HPS 400w, HID ballast	2	464	0.928	3,800	3,526	2	NL110/p - New area light pole or bldg mnt 110w, 100,000+ hour rated life at L70, on board occ sensor	110	0.22	3,800	836	0.708	2,690
Rf#-10 Rm - ext building mount	HV 1L wm wall pack small, HPS 70w, HID ballast	2	95	0.19	900	171	2	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.06	900	54	0.13	117

Qty and kW for Roads Dept :

20

2.2

20

0.5

1.7

kWh for Roads Dept :

4,589

1,074

3,517

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Senior Center / Well - 1021 W Butterfield Rd., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - main entry	1x4x 4L sm wp, F40T12 34w, magnetic ballast	1	144	0.144	2,800	403	1	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	37	0.037	2,800	105	0.1066	298
Rf#-2 Rm - Office #1	2x4x 4L rec trf, F40T12 34w, magnetic ballast	3	144	0.432	2,200	950	3	RLT83/r - (3) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver, (1) 2x4 RFL	28	0.084	2,200	185	0.3478	765
Rf#-3 Rm - large open area	1x4x 4L sm wp, F40T12 34w, magnetic ballast	7	144	1.008	2,800	2,822	7	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	37	0.262	2,800	734	0.7459	2,089
Rf#-4 Rm - large open area	1x4x 2L wm fxt, F40T12 34w, magnetic ballast	3	72	0.216	2,800	605	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	2,800	157	0.1598	448
Rf#-5 Rm - large open area	1x4x 2L sm wp, F40T12 34w, magnetic ballast	10	72	0.72	2,800	2,016	10	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.187	2,800	524	0.5328	1,492
Rf#-6 Rm - M RR	1x4x 2L sm wp, F40T12 34w, magnetic ballast	1	72	0.072	1,500	108	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	1,500	28	0.0533	80
Rf#-7 Rm - W RR	1x4x 2L sm wp, F40T12 34w, magnetic ballast	1	72	0.072	1,500	108	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	1,500	28	0.0533	80
Rf#-8 Rm - kitchen	1x4x 2L sm wp, F40T12 34w, magnetic ballast	10	72	0.72	2,800	2,016	10	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.187	2,800	524	0.5328	1,492
Rf#-9 Rm - kitchen food storage	1x4x 2L sm wp, F40T12 34w, magnetic ballast	1	72	0.072	2,800	202	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	2,800	52	0.0533	149
Rf#-10 Rm - kitchen cooler hallway	1x4x 2L sm wp, F40T12 34w, magnetic ballast	1	72	0.072	2,800	202	1	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.019	2,800	52	0.0533	149
Rf#-11 Rm - kitchen cooler	Inc. 1L jelly jar, CF 18w, CFL ballast	2	20	0.04	2,800	112	2	RL091/s - (1) LED 9w A19 screw in lamp	9	0.018	2,800	50	0.022	62
Rf#-12 Rm - kitchen freezer	Inc. 1L jelly jar, CF 18w, CFL ballast	2	20	0.04	2,800	112	2	RL091/s - (1) LED 9w A19 screw in lamp	9	0.018	2,800	50	0.022	62
Rf#-13 Rm - Conference room	1x4x 2L sm wp, F40T12 34w, magnetic ballast	2	72	0.144	2,800	403	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.037	2,800	105	0.1066	298
Rf#-14 Rm - Conference room	Inc. 2L exit sign, Inc. 25w, n/a	1	50	0.05	2,800	140	1	NLX - New LED exit sign with battery backup	2	0.003	2,800	7	0.0475	133
Rf#-15 Rm - Pool table area	1x4x 4L sm wp, F40T12 34w, magnetic ballast	4	144	0.576	2,800	1,613	4	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	37	0.15	2,800	419	0.4262	1,193
Rf#-16 Rm - M RR entry	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	1,500	90	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	1,500	14	0.051	76
Rf#-17 Rm - M RR	Inc. 2L vanity, Inc. 60w A19, n/a	1	60	0.06	1,500	90	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	1,500	14	0.051	76
Rf#-18 Rm - M RR	1x4x 4L sm wp, F40T12 34w, magnetic ballast	1	144	0.144	1,500	216	1	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	37	0.037	1,500	56	0.1066	160
Rf#-19 Rm - W RR entry	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	1,500	90	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	1,500	14	0.051	76
Rf#-20 Rm - W RR	Inc. 2L vanity, Inc. 60w A19, n/a	1	120	0.12	1,500	180	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	1,500	14	0.111	166
Rf#-21 Rm - W RR	1x4x 4L sm wp, F40T12 34w, magnetic ballast	1	144	0.144	1,500	216	1	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	37	0.037	1,500	56	0.1066	160

W* = wall switch sensor; C* = ceiling sensor; E* = existing sensor, L* Dimming Control

Senior Center / Well Lighting Page 20

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Senior Center / Well - 1021 W Butterfield Rd., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Rf#-22 Rm - custodial	Inc. 1L bare bulb, Inc. 60w A19, n/a	1	60	0.06	800	48	1	RL091/s - (1) LED 9w A19 screw in lamp	9	0.009	800	7	0.051	41
Rf#-23 Rm - ext-building mounted (flag)	Inc. 2L par flood, Inc. 65w P38, n/a	1	120	0.12	4,380	526	1	NL019/flid - New LED flood mounted, 50,000 hour L70 rated life, 19w	19	0.019	4,380	83	0.101	442
Rf#-24 Rm - ext-building mounted (front)	Inc. 1L wm can, Inc. 60w A19, n/a	2	60	0.12	4,380	526	2	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w	12	0.024	4,380	105	0.096	420
Rf#-25 Rm - ext-building mounted	HPS 1L wm wall pack small, HPS 70w, HID ballast	6	95	0.57	4,380	2,497	6	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.18	4,380	788	0.39	1,708
Rf#-26 Rm - ext-building mounted	Inc. 1L wm jelly jar, Inc. 60w A19, n/a	6	60	0.36	4,380	1,577	6	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w	12	0.072	4,380	315	0.288	1,261
Qty and kW for Senior Center / Well :		71		6.2			71			1.5			4.7	
kWh for Senior Center / Well :						17,867							4,486	13,376

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Shop / Police Dept Mobile - 1910 Voss Dr., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Facility Shop

1st Floor

Rf#-14 Rm - all rooms	1x4x 4L sm wp, F40T12 34w, magnetic ballast	8	144	1.152	1,500	1,728	8	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		37	0.3	1,500	449	0.8525	1,279
Rf#-15 Rm - ext-building mounted	Inc. 1L wm vandal, Inc. 60w A19, n/a	2	60	0.12	4,380	526	2	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w		12	0.024	4,380	105	0.096	420

Building/Area: Main Building

1st Floor

Rf#-1 Rm - Garage bays	1x8x 2L sm strip, F96T12 60w, magnetic ballast	8	128	1.024	2,500	2,560	8	RL040/skit - (2) LED 20w strips, 50,000+ hour rated life at L70		40	0.32	2,500	800	0.704	1,760
Rf#-2 Rm - break room	Inc. 1L ceiling fan lamps, Inc. 60w A19, n/a	8	60	0.48	800	384	8	RL091/s - (1) LED 9w A19 screw in lamp		9	0.072	800	58	0.408	326
Rf#-3 Rm - RR lobby	1x4x 4L sm wp, F40T12 34w, magnetic ballast	1	144	0.144	800	115	1	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		37	0.037	800	30	0.1066	85
Rf#-4 Rm - M RR	Inc. 1L bare bulb, Inc. 60w A19, n/a	1	60	0.06	800	48	1	RL091/s - (1) LED 9w A19 screw in lamp		9	0.009	800	7	0.051	41
Rf#-5 Rm - M RR	Inc. 1L jelly jar, Inc. 60w A19, n/a	1	60	0.06	800	48	1	RL091/s - (1) LED 9w A19 screw in lamp		9	0.009	800	7	0.051	41
Rf#-6 Rm - W RR	Inc. 1L bare bulb, Inc. 60w A19, n/a	1	60	0.06	800	48	1	RL091/s - (1) LED 9w A19 screw in lamp		9	0.009	800	7	0.051	41
Rf#-7 Rm - W RR	Inc. 1L jelly jar, Inc. 60w A19, n/a	1	60	0.06	800	48	1	RL091/s - (1) LED 9w A19 screw in lamp		9	0.009	800	7	0.051	41
Rf#-8 Rm - office	1x4x 2L sm wp, F40T12 34w, magnetic ballast	2	72	0.144	1,500	216	2	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		19	0.037	1,500	56	0.1066	160
Rf#-9 Rm - mezzanine offices #1	Inc. 1L rec can, Inc. 60w A19, n/a	4	60	0.24	1,800	432	4	RL091/ckit - (1) recessed can kit, LED 9w, new trim face, 50,000 hour+ rated life at L70		8	0.034	1,800	61	0.206	371
Rf#-10 Rm - mezzanine offices #2	Inc. 1L rec can, Inc. 60w A19, n/a	4	60	0.24	1,800	432	4	RL091/ckit - (1) recessed can kit, LED 9w, new trim face, 50,000 hour+ rated life at L70		8	0.034	1,800	61	0.206	371
Rf#-11 Rm - mezzanine offices #3	Inc. 1L rec can, Inc. 60w A19, n/a	4	60	0.24	1,800	432	4	RL091/ckit - (1) recessed can kit, LED 9w, new trim face, 50,000 hour+ rated life at L70		8	0.034	1,800	61	0.206	371
Rf#-12 Rm - ext-building mounted	HPS 1L wm wall pack FCO, HPS 150w, HID ballast	2	195	0.39	4,380	1,708	2	NL030/wp/fc - New LED wall pack, 50,000 hour L70 rated life, 30w		30	0.06	4,380	263	0.33	1,445
Rf#-13 Rm - ext-building mounted	HPS 1L wm barn light, MV 250w, HID ballast	1	295	0.295	4,380	1,292	1	NL040/brn - New LED area "barn light", 50,000+ hour L70 rated life, 40w		30	0.03	4,380	131	0.265	1,161

Building/Area: PD Mobile

1st Floor

Rf#-16 Rm - all rooms	1x4x 2L sm wp, F40T12 34w, magnetic ballast	17	72	1.224	1,500	1,836	17	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		19	0.318	1,500	477	0.9058	1,359
Rf#-17 Rm - all rooms	Inc. 1L sm dome, Inc. 60w A19, n/a	1	60	0.06	1,500	90	1	RL091/s - (1) LED 9w A19 screw in lamp		9	0.009	1,500	14	0.051	76
Rf#-18 Rm - ext-building mounted	Inc. 1L jelly jar, Inc. 60w A19, n/a	1	60	0.06	4,380	263	1	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w		12	0.012	4,380	53	0.048	210

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Shop / Police Dept Mobile - 1910 Voss Dr., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Rf#-19 Rm - ext-building mounted	Inc. 1L wm wall pack, HPS 70w, HID ballast	1	95	0.095	4,380	416	1	NL012/wp	- New LED wall pack, 50,000 hour L70 rated life, 12w	12	0.012	4,380	53	0.083	364

Qty and kW for Shop / Police Dept Mobile :	68	6.1	68	1.4	4.8
kWh for Shop / Police Dept Mobile :		12,622		2,700	9,922

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Street Lights / Traffic Signals -

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Main Building

1st Floor

Rf#-1 Rm - Road 3 N/89A - security light on	HPS 1L cobra head PC, HPS 250w, HID ballast	2	295	0.59	4,380	2,584	2	NL081/p	- New area light pole mnt 81w, 100,000+ hour rated life at L70	81	0.162	4,380	710	0.428	1,875
Rf#-2 Rm - Road 2 N/89A - security light on	HPS 1L cobra head PC, HPS 250w, HID ballast	4	295	1.18	4,380	5,168	4	NL081/p	- New area light pole mnt 81w, 100,000+ hour rated life at L70	81	0.324	4,380	1,419	0.856	3,749
Rf#-3 Rm - Center/89A - security light on traffic	HPS 1L cobra head PC, HPS 250w, HID ballast	2	295	0.59	4,380	2,584	2	NL081/p	- New area light pole mnt 81w, 100,000+ hour rated life at L70	81	0.162	4,380	710	0.428	1,875
Rf#-4 Rm - Road 1 S/89A - security light on	HPS 1L cobra head PC, HPS 250w, HID ballast	3	295	0.885	4,380	3,876	3	NL081/p	- New area light pole mnt 81w, 100,000+ hour rated life at L70	81	0.243	4,380	1,064	0.642	2,812
Rf#-5 Rm - Road 2 S/89A - security light on	HPS 1L cobra head PC, HPS 250w, HID ballast	2	295	0.59	4,380	2,584	2	NL081/p	- New area light pole mnt 81w, 100,000+ hour rated life at L70	81	0.162	4,380	710	0.428	1,875
Rf#-6 Rm - Road 4 S/89A - roadway light on	HPS 1L cobra head PC, HPS 250w, HID ballast	8	295	2.36	4,380	10,337	8	NL081/p	- New area light pole mnt 81w, 100,000+ hour rated life at L70	81	0.648	4,380	2,838	1.712	7,499

Qty and kW for Street Lights / Traffic Signals :	21	6.2	21	1.7	4.5
kWh for Street Lights / Traffic Signals :	27,134			7,451	19,685

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Town Hall - 202 N Highway 89, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Building/Area: Main Building														
1st Floor														
Rf#-1 Rm - entry lobby	CF 2L rec can, CF 18w, CFL ballast	2	40	0.08	2,500	200	2	RL091/ckit - (1) recessed can kit, LED 9w, new trim face, 50,000 hour+ rated life at L70	8	0.017	2,500	42	0.063	158
Rf#-2 Rm - main hallway	2x4x 3L rec trf, F32T8 32w, electronic ballast	6	90	0.54	2,500	1,350	6	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.216	2,125	459	0.324	891
Rf#-3 Rm - M RR	1x4x 2L sm strip (cove), F32T8 32w, electronic ballast	3	59	0.177	1,500	266	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	1,500	84	0.1208	181
Rf#-4 Rm - W RR	1x4x 2L sm strip (cove), F32T8 32w, electronic ballast	3	59	0.177	1,500	266	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	19	0.056	1,500	84	0.1208	181
Rf#-5 Rm - reception desk	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	2,500	450	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	2,125	153	0.108	297
Rf#-6 Rm - office behind desk	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	2,500	450	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	2,125	153	0.108	297
Rf#-7 Rm - main hallway	2x4x 3L rec trf, F32T8 32w, electronic ballast	4	90	0.36	2,500	900	4	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.144	2,125	306	0.216	594
Rf#-8 Rm - Office #1	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	1,800	324	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	1,530	110	0.108	214
Rf#-9 Rm - copy room	2x4x 3L rec trf, F32T8 32w, electronic ballast	1	90	0.09	1,800	162	1	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.036	1,530	55	0.054	107
Rf#-10 Rm - back hallway	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	2,500	450	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	2,125	153	0.108	297
Rf#-11 Rm - Office #2	2x4x 3L rec trf, F32T8 32w, electronic ballast	3	90	0.27	1,800	486	3	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.108	1,530	165	0.162	321
Rf#-12 Rm - server room	2x4x 3L rec trf, F32T8 32w, electronic ballast	1	90	0.09	500	45	1	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.036	425	15	0.054	30
Rf#-13 Rm - Office hallway	2x4x 3L rec trf, F32T8 32w, electronic ballast	3	90	0.27	2,500	675	3	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.108	2,125	230	0.162	446
Rf#-14 Rm - Office #3	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	1,800	324	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	1,530	110	0.108	214
Rf#-15 Rm - Office #4	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	1,800	324	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	1,530	110	0.108	214
Rf#-16 Rm - Office #5	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	1,800	324	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	1,530	110	0.108	214
Rf#-17 Rm - Office #6	2x4x 3L rec trf, F32T8 32w, electronic ballast	2	90	0.18	1,800	324	2	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.072	1,530	110	0.108	214
Rf#-18 Rm - Office #7	2x4x 3L rec trf, F32T8 32w, electronic ballast	4	90	0.36	1,800	648	4	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.144	1,530	220	0.216	428
Rf#-19 Rm - board room	2x4x 3L rec trf, F32T8 32w, electronic ballast	18	90	1.62	1,000	1,620	18	RL036/tkit - (1) LED 36w linear recessed troffer w/volumetric lens, 100,000+ hour life at L70 L-DS	36	0.648	850	551	0.972	1,069
Rf#-20 Rm - conference room	1x4x 4L sm wp, F32T8 32w, electronic ballast	2	112	0.224	1,000	224	2	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver	37	0.075	1,000	75	0.1491	149
Rf#-21 Rm - ext-ground mounted	MH 1L flood, slip, MH 175w, HID ballast	2	215	0.43	2,000	860	2	NL019/flid - New LED flood mounted, 50,000 hour L70 rated life, 19w	19	0.038	2,000	76	0.392	784

W* = wall switch sensor; C* = ceiling sensor; E* = existing sensor, L* Dimming Control

Town Hall Lighting Page 25

Town of Chino Valley - Lighting Detail Report

(sorted by building, floor, area)



Town Hall - 202 N Highway 89, Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT							
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd
Rf#-22 Rm - ext-ground mounted	MH 1L bollard (perciline), MH 175w, HID ballast	4	215	0.86	2,000	1,720	4	RL018/s/gc - (1) LED 18w A19 screw in lamp 120/277v	18	0.072	2,000	144	0.788	1,576
Rf#-23 Rm - ext-pole mounted	HPS 1L shoe box, SqP, DB, 5SH, HPS 250w, HID ballast	5	295	1.475	4,380	6,461	5	NL072/p/s - New area light pole or bldg mnt 72w, 100,000+ hour rated life at L70, on board occ sensor	72	0.36	4,380	1,577	1.115	4,884
Rf#-24 Rm - ext-building mounted	MH 1L wm wall pack FT, MH 175w, HID ballast	7	215	1.505	2,000	3,010	7	NL030/wp/ft - New LED wall pack, 50,000 hour L70 rated life, 30w	30	0.21	2,000	420	1.295	2,590
Qty and kW for Town Hall :		84		10.0			84			2.9			7.1	
kWh for Town Hall :						21,862							5,512	16,350

Town of Chino Valley - Lighting Detail Report
(sorted by building, floor, area)



Waste Water Treatment Plant - 2190 Rodeo Dr., Chino Valley, AZ 86323

PRE-RETROFIT							POST RETROFIT								
Location	Existing Fixture Description	Qty	Wt/Fxt	kW	Hours	kWh	Qty	Retrofit Code	Description (Sensor in RED)	Wt/Fxt	kW	Hours	kWh	kW Svd	kWh Svd

Building/Area: Effluent Bldg

1st Floor

Rf#-7 Rm - ext-building mounted	1x8x 2L sm vapor tight, F96T12 60w, magnetic ballast	2	128	0.256	4,380	1,121	2	RL040/skit - (2) LED 20w strips, 50,000+ hour rated life at L70		40	0.08	4,380	350	0.176	771
Rf#-8 Rm - UV room	1x4x 2L sm vapor tight, F40T12 34w, magnetic ballast	3	72	0.216	800	173	3	RLT82 - (2) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		19	0.056	800	45	0.1598	128

Building/Area: Filter/Press

1st Floor

Rf#-3 Rm - filter press room	1x8x 2L sm vapor tight, F96T12 60w, magnetic ballast	7	128	0.896	2,300	2,061	7	RL040/skit - (2) LED 20w strips, 50,000+ hour rated life at L70		40	0.28	2,300	644	0.616	1,417
Rf#-4 Rm - MCC	1x8x 2L sm ind hood, F96T12 60w, magnetic ballast	2	128	0.256	1,200	307	2	RL040/skit - (2) LED 20w strips, 50,000+ hour rated life at L70		40	0.08	1,200	96	0.176	211
Rf#-5 Rm - pump room	1x8x 2L sm ind hood, F96T12 60w, magnetic ballast	6	128	0.768	2,300	1,766	6	RL040/skit - (2) LED 20w strips, 50,000+ hour rated life at L70		40	0.24	2,300	552	0.528	1,214
Rf#-6 Rm - ext-building mounted	HPS 1L wm wall pack large, HPS 150w, HID ballast	2	195	0.39	4,380	1,708	2	RL050/kit - (1) LED retrofit module, 50w, 50,000+ hour rated life at L70		50	0.1	4,380	438	0.29	1,270

Building/Area: Headwork's

1st Floor

Rf#-1 Rm - main room	1x8x 2L sm vapor tight, F96T12 60w, magnetic ballast	10	128	1.28	2,300	2,944	10	RL040/skit - (2) LED 20w strips, 50,000+ hour rated life at L70		40	0.4	2,300	920	0.88	2,024
Rf#-2 Rm - ext-building mounted	HPS 1L wm wall pack large, HPS 150w, HID ballast	4	195	0.78	4,380	3,416	4	RL050/kit - (1) LED retrofit module, 50w, 50,000+ hour rated life at L70		50	0.2	4,380	876	0.58	2,540

Building/Area: Office Trailer

1st Floor

Rf#-10 Rm - all rooms	1x4x 4L sm wrap, F40T12 34w, magnetic ballast	7	144	1.008	1,200	1,210	7	RLT84 - (4) LED 4' T8 lamp 12w, 50,000+ hour rated life at L70, (1) 2L LP electronic ballas/driver		37	0.262	1,200	314	0.7459	895
Rf#-11 Rm - all rooms	Inc. 1L sm dome, Inc. 60w A19, n/a	3	60	0.18	1,200	216	3	RL091/s - (1) LED 9w A19 screw in lamp		9	0.027	1,200	32	0.153	184
Rf#-12 Rm - ext-building mounted	Inc. 1L jelly jar, Inc. 60w A19, n/a	2	60	0.12	4,380	526	2	NL012/wp - New LED wall pack, 50,000 hour L70 rated life, 12w		12	0.024	4,380	105	0.096	420

Building/Area: Treatment Track

1st Floor

Rf#-9 Rm - ext-pole mounted	HPS 1L post top explosion proof, HPS 100w, HID ballast	4	130	0.52	4,380	2,278	4	RL027/s/tg - (1) LED 27w screw in lamp 120/277v, 50,000 hour rated life at L70		27	0.108	4,380	473	0.412	1,805
-----------------------------	--	---	-----	------	-------	-------	---	--	--	----	-------	-------	-----	-------	-------

Qty and kW for Waste Water Treatment Plant :	52	6.7	52	1.9	4.8
kWh for Waste Water Treatment Plant :		17,726		4,845	12,879

Attachment “C”
Mechanical Equipment Schedule

Library - HVAC Inventory

Location Served	Equipment	QTY	Existing					Proposed		
			Manuf.	Model No.	Ton	Year	Elec	Manuf.	Model No.	Elec
North (New Addition)	Packaged HP	1	Carrier	50JS-060---311	5	2003	208-230/1ph	Carrier	50HCQA06	208-230/1ph
North Wing	Gas Pack	2	Ruud	URGG-10E61JKR	5	1992	208-230/1ph	Carrier	48HCLA06	208-230/1ph
South Wing	Gas Pack	2	Heil	PGAA47F1K3	4	1996	208-230/1ph	Carrier	48HCLA05	208-230/1ph
South Wing	Split Condenser	1	Ruud	UAKA-042JAZ	3.5	2000	208-230/1ph	Carrier	24AAA542A	208-230/1ph
South Wing	Split Furnace	1	Amana	GHE120DN-4	N/A	2000	115/60/1ph	Carrier	59SP5A120E	115/60/1ph

Police Department - HVAC Inventory

Location Served	Equipment	QTY	Existing					Proposed		
			Manuf.	Model No.	Ton	Year	Elec	Manuf.	Model No.	Elec
Police Dept.	Gas Pack	1	Heil	50JS-060---311	5	1996	208-230/1ph	Carrier	48HCLA06	208-230/1ph
Police Dept.	Split Condenser	1	Heil	~	3	1996	208-230/1ph	Carrier	24AAA536A	208-230/1ph
Police Dept.	Split Furnace	1	~	~	~	~	115/60/1ph	Carrier	59SP5A100E	115/60/1ph

Attachment “D”
Technical Appendix

Due to the size of Attachment "D," it is not included in this packet, but it will be included with the online version as a separate document. See <http://www.chinoaz.net/AgendaCenter>.

A printed copy is available for viewing in the Town Clerk's/Town Council Office.

Attachment “E” Form of Change Order

“ATTACHMENT E”**FORM OF CHANGE ORDER**

CHANGE ORDER NO. _____

Distribution: TOWN []
 CLIMATEC []
 OTHER []

PROJECT: _____

DATE:

OWNER: Town of Chino Valley

CONSULTANT:

AGREEMENT DATED:

CHANGES: The Agreement is changed as follows:

Not valid until signed by both Town and Climatec.

Signature of Climatec indicates acceptance.

The original compensation was _____

Net change by previously authorized Change Orders _____

The compensation prior to this Change Order was _____

The compensation will be increased by this Change Order in the amount of
 _____The new compensation under the Agreement including this Change Order will be

The Contract Time will increase by _____

ACCEPTANCE STATUS:

 Climatec, LLC

By _____

Date _____

 Town of Chino Valley

By _____

Date _____

CLIMATEC MEASUREMENT AND VERIFICATION AGREEMENT FOR Town of Chino Valley

SCOPE OF SERVICES

TERMS AND CONDITIONS

ATTACHMENTS

Attachment “A” – Guaranteed Savings Measurement & Verification

- I. Savings Guarantee
- II. Measurement And Verification Methods
- III. Selected Measurement And Verification Options
- IV. Specific M&V Plan For Each ECM:
 - a. Lighting System Upgrades
 - b. HVAC System Installation
 - c. HVAC Controls Upgrades

Attachment “B” – Utility Baseline Summary

Attachment “C” – Standards of Operation (Lighting & HVAC)

- I. Standards of Operation for HVAC
- II. Standards of Operation for Lighting

CLIMATEC M&V AGREEMENT

This Measurement and Verification (“M&V”) Agreement (“Agreement”) dated July 27, 2016 (“Effective Date”) is made by and between:

Town of Chino Valley, AZ (“Purchaser”)
with its principal place of business at
202 N. State Route 89, Chino Valley, AZ 86323
and

Climatec, LLC
With its principal place of business at
2851 W. Kathleen Rd, Phoenix, AZ 85053

Purchaser and Climatec LLC agree as follows:

This Agreement shall include the Attachment(s) listed below:

- Attachment “A” - Guaranteed Savings Measurement & Verification
- Attachment “B” – Utility Baseline Summary
- Attachment “C” – Standards of Operation (Lighting & HVAC)

SCOPE OF SERVICES

Energy Savings Measurement & Verification (M&V) Service:

Climatec LLC will provide measurement and verification services of the energy savings associated with Purchaser’s Energy Retrofit Installation, as described in Attachment A - Scope of Work, located in the associated Installation Agreement. Energy Savings M&V reports will be provided to the Purchaser on an annual basis.

Term:

This Agreement shall commence upon the completion and acceptance of the Purchaser’s Energy Retrofit Installation Project as described in the “Installation Agreement for Town of Chino Valley” dated July 12, 2016 and receipt of final payment for that contract and shall continue for a term of 15 years. The Purchaser may terminate this Agreement at any time with a 60 day written notice. However, termination of this Agreement will void any savings guarantee associated with the Installation project.

Charges:

This Agreement shall be billed once per year and is due and payable upon the Purchaser’s receipt of invoice. The annual Service Agreement charge is \$4,500 for the first three years and escalated at 4% annually for every subsequent year thereafter. This rate does not include taxes.

TERMS AND CONDITIONS

1.0 General Provisions:

1.1 Unless stated otherwise, the services provided under this Agreement shall be provided during Climatec LLC's normal business hours. Normal business hours are Monday through Friday, 8:00 A.M. to 5:00 P.M. inclusive, excluding holidays.

1.2 The Purchaser shall provide reasonable means of access to the equipment being measured or verified. Climatec LLC shall not be responsible for any removal, replacement, or refinishing of the building structure, if required to gain access to the equipment. Climatec LLC shall be permitted to start and stop all equipment necessary to perform the services herein described as arranged with the Purchaser's representative.

1.3 This Agreement, when accepted in writing by the Purchaser and approved by an authorized Climatec LLC representative, shall constitute the entire Agreement between the two (2) parties.

2.0 Charges:

2.1 For services not covered by this Agreement, but performed by Climatec LLC upon the Purchaser's authorization, the Purchaser agrees to pay Climatec LLC upon presentation of itemized invoice(s) at Climatec LLC's current rates.

2.2 If emergency service is requested by the Purchaser and inspection does not reveal any defect for which Climatec LLC is liable under this Agreement, the Purchaser will be charged at Climatec LLC's current emergency charge rates.

3.0 Limitations of Liability:

3.1 Climatec LLC shall not be liable for any loss, delay, injury, or damage that may be caused by circumstances beyond its control including, but not restricted to; acts of God, war, civil commotion, acts of government, fire, theft, corrosion, floods, lightning strikes, freezes, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, shortage of vehicles, fuel, labor or materials, or malicious mischief. IN NO EVENT SHALL CLIMATEC LLC BE LIABLE FOR BUSINESS INTERRUPTION, LOSSES, OR CONSEQUENTIAL, INDIRECT, SPECIAL OR SPECULATIVE DAMAGES.

3.2 Climatec LLC shall not be required to make safety tests, install new devices, or make modifications to any equipment to comply with recommendations or directives of insurance companies, governmental bodies, or for other reasons.

3.3 Climatec LLC shall not be required to make replacements or repairs necessitated by reason of negligence, abuse, misuse, or by reason of any other cause.

3.5 This agreement pre-supposes that all equipment is in satisfactory working order. Climatec LLC will inspect the equipment within sixty (60) days after the agreement takes effect and will advise the Purchaser of any equipment found to be in need of repair. If the Purchaser does not authorize Climatec LLC to make the repairs or if the Purchaser does not have the work performed, the equipment will be eliminated from coverage and the Agreement savings will be adjusted. Maintenance of existing equipment and systems is the responsibility of the Purchaser. Failure to properly maintain equipment and systems can result in reduced energy efficiency and may necessitate a baseline energy adjustment. There may be some equipment which, for reasons beyond Climatec LLC's control, cannot be inspected before this Agreement takes effect. Climatec LLC will inspect such equipment on the first visit where the equipment is available.

3.6 The amount of any present or future sales, use, occupancy excise, or other tax (federal, state, or local) which Climatec LLC hereafter shall be obligated to pay, either on its own behalf or on the behalf of the Purchaser or otherwise, with respect to the services covered by this Agreement, shall be paid by the Purchaser.

3.7 If the equipment or software included under this Agreement is altered, modified, or changed by a party other than Climatec LLC, this Agreement shall be modified to incorporate such changes and the Agreement price and/or Savings shall be adjusted accordingly.

3.8 Following twelve (12) months of service or any time thereafter, if individual item(s) cannot, in Climatec LLC's opinion, be properly repaired on-site because of excessive wear or deterioration, Climatec LLC may withdraw the item(s) from coverage upon ninety (90) days prior written notice. Energy savings may be adjusted accordingly.

3.9 This Agreement shall be governed by, construed, and enforced in accordance with the laws of the State of Arizona.

4.0 Miscellaneous Provisions:

4.1 The services provided hereunder may occur on active Purchaser sites. As such, Climatec LLC shall ensure that its services on and around the Purchaser site comply with all applicable laws, regulations and standards including but not limited to, the fingerprinting requirements of the Education Code and any other legal requirements which may be applicable to Climatec LLC's activities on or about the Purchaser sites. While the Purchaser shall reasonably assist Climatec LLC in determining the applicable requirements, it shall be Climatec LLC's sole responsibility for determining and complying with all applicable laws, regulations, and standards.

4.2 Dispute Resolution:

4.2.1 Disputes: This Section shall apply to any dispute arising under or related to this Agreement (whether arising in contract, tort or otherwise, and whether arising at law or in equity), including (a) any dispute regarding the performance, validity or enforceability of any provision of this Agreement or whether any Party is in compliance with, or breach of, any provisions of this Agreement and (b) the applicability of this Section to a particular dispute. Any dispute to which this Section applies is referred to herein as a "Dispute."

4.2.2 Negotiation to Resolve Disputes: If a Dispute arises, the Parties shall attempt to resolve such dispute through the following procedure:

4.2.2.1 First, the representatives of each of the Parties shall promptly meet (whether by phone or in person) in a good faith attempt to resolve the Dispute;

4.2.2.2 Second, if the Dispute is still unresolved after 20 days following the commencement of the negotiations described in Section 4.2.2.1 then the designated executive officer of each Party shall meet (whether by phone or in person) in a good faith attempt to resolve the Dispute;

4.2.2.3 Third, if the Dispute is still unresolved after 10 days following the commencement of the negotiations described in Section 4.2.2.2, then either Party may submit such Dispute to arbitration pursuant to Section 4.2.2.4;

4.2.2.4 Any Dispute arising from or relating to this Agreement that is adjudicated pursuant to this Section 4.2.2.4 shall be arbitrated in Chino Valley, Arizona. The arbitration shall be in accordance with its Comprehensive Arbitration Rules and Procedures with an arbitrator mutually agreed upon by the parties, and judgment on any award may be entered in any court of competent jurisdiction. If the Parties agree, a mediator may be consulted prior to arbitration. The prevailing party in any dispute arising out of this Agreement shall be entitled to reasonable attorneys' fees and costs; and

4.2.2.5 Pending a final resolution of a Dispute, the Parties shall each proceed diligently and faithfully with performance of their respective obligations under this Agreement.

4.3 Indemnification:

To the fullest extent permitted by law, Climatec shall indemnify and hold harmless Purchaser, its officers, officials and employees from and against all liabilities, damages, losses and expenses (including reasonable attorney fees and court costs), caused by, arising out of, or resulting from the negligence, recklessness or intentional wrongful conduct of Climatec, its subcontractors, employees or any other persons used by Climatec or its subcontractors (hereinafter collectively "Climatec") related to the Services in the performance of this Agreement. Climatec LLC's duty to indemnify and hold harmless Purchaser, its officers, officials and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use of resulting therefrom, caused by Climatec LLC's negligence, recklessness or intentional wrongful conduct in the performance of this Agreement and the negligence, recklessness or intentional wrongful

conduct of any person employed by Climatec or used by Climatec in the performance of this Agreement. Such indemnity does not extend to Purchaser's negligence, recklessness or intentional wrongful conduct.

5. Occupational Safety and Health: The Parties hereto agree to notify each other immediately upon becoming aware of any alleged violation of, the Occupational Safety and Health Act (OSHA) relating in any way to the project or project site.

6. Entire Agreement: This Agreement, upon acceptance, shall constitute the entire agreement between the parties and supersedes any prior representations or understandings.

7. Changes: No change or modification of any of the terms and conditions stated herein shall be binding upon either Party unless accepted by both Parties in writing.

8. Severability: If one or more of the provisions of this Agreement are held to be unenforceable under laws, such provision(s) shall be excluded from these terms and conditions and the remaining terms and conditions shall be interpreted as if such provision were so excluded and shall be enforced in accordance to their terms and conditions.

9. Counterparts: This Agreement may be executed in multiple counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. A signature on a copy of this agreement received by either party by facsimile or portable document format (PDF) is binding upon the other party as an original. The parties shall treat a photocopy of such facsimile as a duplicate original.

10. Assignment: Climatec LLC retains the right to assign its rights and obligations of this Agreement with written consent of Purchaser.

11. Acknowledgment: Both Climatec LLC and the Purchaser acknowledge having read this Agreement and all contract documents incorporated herein and have executed this agreement on the date written above.

12. NOTICES. This Agreement shall be managed and administered on behalf of the respective parties by the individuals identified below. All invoices shall be submitted to and approved by the Purchaser's representative so identified. In addition to personal service, all notices may be given to Purchaser and to Climatec LLC by first class mail addressed to said party.

Climatec LLC:
2851 W. Kathleen Rd.
Phoenix, AZ 85053
Contact Person:
Taylor Jones
M&V Leader
602-906-1736
TaylorJ@Climatec.com

Town of Chino Valley:
202 N. State Route 89
Chino Valley, AZ 86323
Contact Person:
Robert Smith
Town Manager
928-636-2646
rsmith@chinoaz.net

13. Non-Appropriations. This Agreement is subject in all respects to the provisions of the Arizona Constitution, article IX, §5, A.R.S. § 42-17106, and applicable Arizona common law.

14. E-Verify Requirements. To the extent applicable under A.R.S. § 41-4401, Climatec LLC and its subcontractors warrant compliance with all federal immigration laws and regulations that relate to their employees and compliance with the E-verify requirements under A.R.S. § 23-214(A). Climatec LLC's, or its subcontractor's, breach of the above-mentioned warranty shall be deemed a material breach of this Agreement and may result in the termination of this Agreement by the Purchaser. The Purchase retains the legal right to randomly inspect the papers and records of Climatec LLC and its subcontractors who work on this Agreement to ensure that Climatec LLC and its subcontractors is complying with the above-mentioned warranty.

Climatec LLC and its subcontractors warrant to keep the papers and records open for random inspection by the Purchaser during normal business hours. Climatec LLC and its subcontractors shall cooperate with the Purchaser's

random inspections including granting the Purchaser entry rights onto its property to perform the random inspections and waiving their respective rights to keep such papers and records confidential.

15. Non-Boycott of Israel. Climatec LLC hereby certifies that it is not currently engaged in, and agrees for the duration of this Agreement that it will not engage in, a boycott of Israel, as that term is defined in A.R.S. § 35-393.

16. Approval: Each party represents that the person that has executed this Agreement on its' behalf is authorized to do so.

Town of Chino Valley, AZ

Climatec, LLC

Signature

Signature

Print Name

Print Name

Title

Title

Date

Date

Approved As To Form

Town Attorney

Attachment “A”

Guaranteed Savings Measurement & Verification

Attachment A

Guaranteed Savings Measurement & Verification

This document contains the energy savings Measurement and Verification (M&V) plan for the Energy Conservation Measures (ECMs) contained in the Purchaser's Installation Agreement. The following table summarizes the ECMs proposed. – See below Table 1.0

TABLE 1.0

Site	Lighting System Upgrades	HVAC System Installation	HVAC Control Upgrades
Animal Control	X		X
Community Center	X		X
Court Building	X		X
Library	X	X	X
Old Food Bank Building	X		
Police Department	X	X	X
Pool - Aquatic Buildings and Ball Fields	X		X
Public Works	X		X
Roads Department	X		X
Senior Center	X		X
Shop/Police Department Mobile	X		X
Town Hall	X		X
Waste Water Treatment Plant	X		
Parks	X		
Street Lights/Traffic Signals	X		
Bright Star Pumps/Wells	X		
Country West Pumps/Wells	X		

A specific Measurement and Verification Plan is submitted for each Energy Conservation Measure (ECM) to provide a comprehensive overall Plan for Purchaser. Energy savings are to be compared to the Utility Baseline Summary, as shown in Attachment B. Each measure's M&V Plan provides:

- A description of how the savings shall be verified for each ECM.
- Selection of specific protocol for verification of savings of each ECM.
- Requirements for measurement or other means to establish the ECM savings.

Climatec LLC is responsible for the pre-retrofit measurement, energy savings calculations, equipment installation, and required post retrofit verification as outlined herein. Purchaser agrees to operate and maintain all equipment installed. **Proper operation and maintenance of equipment and systems is critical to long-term achievement of energy savings.**

SAVINGS GUARANTEE

Per ARS 15-213.01, Climatec LLC warrants that Purchaser shall realize total utility savings and utility rebates ("Guaranteed Project Savings") in excess of the project cost during the course of the useful life of the installed equipment (estimated to be 15 years). The utility component of the above guaranteed project savings is based on annual reduction in utility usage of 659 MMBtu/yr. The effective date will begin on the date of final acceptance of the Installation project and receipt of final payment for the associated Installation Contract and continue for a term not to exceed 15 years (Guarantee Period). Guarantee period meets ARS 15-213.01 guidelines to which equipment and installation costs do not exceed guarantee amount for guarantee period for equipment useful life. Climatec LLC agrees to complete the M&V Report on an annual basis and deliver to the Purchaser within sixty (60) days of the anniversary date of final acceptance and annually thereafter. Project Savings that are verified during the course of construction will be applied to guaranteed project savings.

In the event that an annual M&V Report savings value (including any excess savings from previous years) does not meet the Guaranteed Project Savings in accordance with the M&V Plan, then Climatec LLC shall issue a check for the shortfall to the District within 30 days of acceptance of the annual verification report. However, under no circumstances will the amount(s) paid for the total of the energy savings shortfalls exceed **\$596,635** "Installation Contract Amount".

If the annual M&V Report demonstrates that the project will achieve one hundred percent (100%) or more of the Guaranteed Project Annual Savings, then Climatec LLC shall have satisfied its energy performance guarantee obligation and the Purchaser shall accept the M&V Report. .

The Purchaser agrees that energy savings, which exceed the guaranteed amount in any one (1) year, may be applied to previous or future year's savings to offset an energy savings shortfall. The savings guarantee will remain in effect for the term of this agreement. Cancellation of this agreement will result in the termination of the savings guarantee.

The Utility Baseline Summary, as shown in Attachment B, may be modified over the course of the Guarantee Period to adjust for changes in utility rates, number of days in utility billing cycle, square footage, energy using equipment, building occupancy and weather. This Guarantee is subject to the Purchaser's adherence to the Standards of Operation for Lighting and HVAC systems, as documented in Attachment "C" of this agreement.

MEASUREMENT AND VERIFICATION METHODS

Measurement and Verification (M&V) of energy savings is a methodology based on standard industry protocol intended to provide reasonable assurance that energy savings calculated are realized over the term of the contract.

The development of the M&V plan is based on the IPMVP-2001 (International Performance Measurement and Verification Protocol) and the application of sound engineering and business guidelines to the overall need for verification of energy savings for each ECM. This plan contains methodology that shall cost effectively provide assurance of equipment savings through short term or spot measurements, engineering calculations and/or direct utility billing comparisons. The necessary components to a well-established M & V Plan are:

- Specific identification of each ECM and proposed M & V. Reporting requirements for overall savings.
- Participation of all parties and any necessary coordination with independent review.

Methods of M&V vary in accordance with the type of project, level of assurance of savings, cost, and availability of data, financing constraints, and energy costs. The methods selected must be cost effective given the financial savings to the Purchaser. The methods used for the ECMs detailed herein were selected to minimize M&V cost while still providing a reasonable assurance of the savings calculations.

The IPMVP-2001 guideline provides the following options related to methodology for M&V:

Option A – Partially Measured Retrofit Isolation. Option A uses a combination of stipulated and/or measured factors to calculate baseline usage and savings associated with the ECM. Spot or short-term measurement would be used for the measured values. Stipulated values are supported by Purchaser input, historical data, or manufacturer data.

- Baseline and savings calculations are provided through engineering calculations, component or system models.
- Depending on number of points measured, Option A provides the least cost alternative to M&V.

Option B – Retrofit Isolation. Option B provides for measurement to provide data for assessing values or variables. Spot or short-term measurement, taken at the component and/or system level are taken when variations in factors can be accounted for or eliminated. Continuous measurement at the component and/or system level can also be used to account for the variations in factors over time.

- Baseline and savings calculations are provided through engineering calculations, component or system models.
- Cost is variable depending on the points measured, and the term of the measurement process used. Option B provides a better scenario for ECMs where a small number of factors can be accurately measured with a measurement plan.

Option C – Whole Building. Option C involves the use of utility meters or whole building sub-metering to assess the energy performance of the entire building. After an ECM is implemented the billing data is assessed in accordance with an approved plan to determine actual ECM savings.

- Baseline is established through utility data and engineering/regression analysis.
- Engineering calculations or modeling initially provides estimated ECM savings.
- Actual ECM savings are based on the utility or metered data. Savings must be adjusted for changes in building operation and variables assumed in the engineering calculations or modeling (such as weather, occupancy, etc.).
- Cost of this approach is variable based on the availability of utility data, sub-metered data, and overall savings guarantee. If the metered data is used for a savings guarantee, all variables related to building performance must be measured and adjusted, usually on an annual basis. Option C usually requires a substantial amount of time and effort to establish the baseline, provide adjustments and track the savings.

Option D – Calibrated computer simulation. Option D uses computer-modeling techniques to provide an engineering model of component and/or system performance. The inputs to the computer simulation may be made by engineering estimates, short or long term measurements, and utility or other metered data. Once the model is properly calibrated it is used for the establishment of the baseline and savings by changing appropriate inputs.

- Baseline is established through a calibration process for the computer modeling. Appropriate measurements and inputs are reflected against regression analysis for the metered data.
- Once the model is calibrated and the baseline established inputs are varied for the proposed ECM to establish savings.
- Actual ECM savings are stipulated based on the computer model. There may be follow up calibration of the model with the ECM in place to affirm the overall building simulation model.
- Cost of this method varies based on the complexity and accuracy of model desired, availability of data and overall measurement required.

SELECTED MEASUREMENT AND VERIFICATION OPTIONS

For the ECM's covered under this M&V plan, the Table of Selected M&V Options, located on the following page summarizes the proposed **IPMVP Options selected**: See table 1.1 below

TABLE 1.1

Site	Lighting System Upgrades	HVAC System Installation	HVAC Control Upgrades
Animal Control	A		A
Community Center	A		A
Court Building	A		A
Library	A	A	A
Old Food Bank Building	A		
Police Department	A	A	A
Pool - Aquatic Buildings and Ball Fields	A		A
Public Works	A		A
Roads Department	A		A
Senior Center	A		A
Shop/Police Department Mobile	A		A
Town Hall	A		A
Waste Water Treatment Plant	A		
Parks	A		
Street Lights/Traffic Signals	A		
Bright Star Pumps/Wells	A		
Country West Pumps/Wells	A		

The particular option selected for each ECM was based on a number of related issues including: ECM cost, ECM savings, cost of Measurement and Verification and the ability to accurately determine whole building operations.

The baseline and the post-installation energy use depend on various system and external factors, such as energy demand, operating hours, weather conditions, motor loading, energy rates, and occupancy. Development of the baseline, post ECM consumption, cost avoidances and simple payback for each ECM covered by this M&V plan includes:

- Stipulated Values – These values are important in the overall calculations for energy consumption, financial calculations, and operating conditions. Climatec LLC and Purchaser have agreed to these values for purposes of establishing savings.
- Developed/Measured Values – These are the values determined by spot or short-term measurement. Values are determined based on a sound engineering approach to variable determination. Both values used for baseline consumption and values to be measured/determined as parts of the post ECM implementation are detailed.
- Assumptions – Some values that are assumed in order to calculate energy use are necessary in certain circumstances.

- Calculations – The necessary calculations for baseline energy and demand usage, the calculation of the energy and demand components with implementation of the ECM, the calculation of costs, and annual savings are the primary tool for assessing the estimated and actual savings of any ECM.
- Instrumentation – The type and specifications, if applicable, for any instrumentation used for developed/measured values is provided to ensure appropriate meters and measurement equipment is used for specified applications.
- Pre Retrofit Measurements – Each ECM may have a section detailing the measurements required prior to the retrofit. These measurements are used to establish the baseline or adjustments required to establish an accurate baseline.
- Post Retrofit Measurements – Each ECM may have a section that details the measurements required if any after the retrofit is completed. This section is utilized to detail the type of measurements required for verification of the energy savings calculations.
- Adjustments – Each ECM may have a section for adjustments. This section includes possible adjustments to the actual Energy Audit Report and energy information, appropriate adjustments to the M&V plan, and adjustments to any savings guarantee. This section is utilized to anticipate changes necessary due to field conditions and provide an appropriate response in the verification of actual energy and cost avoidances.
- Commissioning – Each ECM may have a section regarding the commissioning process. This provides the detail for how the savings will be verified upon project completion, and the type of inspection that will be completed, and the billing method for verified savings. This section is utilized to provide a standard approach for each ECM upon project completion.

Climatec LLC will follow the agreed-upon M&V protocols for the measurement period and will prepare post-installation reports with supporting documentation for the Purchaser. The cost of M&V is included in the project cash flow requirements.

SPECIFIC MEASUREMENT AND VERIFICATION PLAN

“OPTION A” FOR LIGHTING SYSTEM UPGRADES

Introduction

This Measurement and Verification Plan (M&V) is specific to all lighting retrofits and occupancy sensor installations. The sites receiving these upgrades are listed in the Table of Recommended Measures located at the beginning of this Attachment.

M&V Protocol

For this ECM, IPMVP Protocol – Option A shall be utilized. This option provides for the measurement of at least one variable pre and post retrofit with other variables allowed for stipulation. For this retrofit, a representative sample of each of the fixture types will be measured. The same sample will be used for both pre and post retrofit calculations. Wattage shall be measured with an appropriate instrument that is properly calibrated.

Light Levels

A representative sample of the light levels shall be measured. Where rooms have similar or identical lighting design, it is not required that each room be measured. Light levels shall be measured by an appropriate instrument that is properly calibrated. Light level measurements apply to both pre and post retrofit areas and shall be recorded at the work surface. Where rooms do not have a specific work surface light levels shall be measured at the floor.

Documentation

All areas measured shall be documented. The data shall indicate areas that do not meet IESNA standard light level requirements. All instrumentation used shall be clearly documented.

Stipulated Values

Operating Hours are stipulated for purposes of M&V. Please see Attachment “C”, Lighting Standards of Operation for a complete list of lighting hours of operation.

Savings Calculations

The calculations for the baseline energy consumption and post retrofit savings provide the basis for the overall financial viability of this ECM.

kWh and/or kW Savings

The electrical consumption reduction of a particular lighting ECM is determined by comparing the pre and post conditions applied to the hours agreed upon in the Standards of Operation.

$$\{[(\text{Existing watts/fixture}) \times (\text{existing quantity}) \times (\text{existing hours of operation})] - [(\text{proposed watts/fixture}) \times (\text{proposed quantity}) \times (\text{proposed hours of operation})]\} / 1000 = \text{kWh savings}$$

Dollar Savings

After calculating the kWh saved, the specific facility’s average cost per kilowatt hour shall be used to determine dollar savings.

$$(\text{kWh saved}) \times (\text{average kWh rate}) = \$ \text{kWh saved}$$

$$(\$ \text{kWh saved}) = \text{the total dollars saved}$$

Operational Savings

The Purchaser will realize maintenance and operational savings resulting from the new lighting system installations, extended warranties, and/or service agreements provided by Climatec LLC. The operational savings are stipulated and met upon the completed installation of the energy retrofit contract.

Adjustments

For this ECM the following adjustments are allowed for purposes of Measurement and Verification:

- Light level requirements may be modified as detailed in this plan.
- Changes in actual construction including number and/or type of fixtures. All changes shall be clearly documented and provided to the Purchaser's representative.

Commissioning

Commissioning shall consist of inspections and a final savings verification report. Inspections shall consist of:

- During the construction phase of the project, Climatec LLC shall keep a detailed record of the quantity and types of fixtures retrofitted and fixtures installed in each building. A post construction inspection is required by the responsible M&V party.
- After lighting modifications have been made, the installations shall be inspected to verify the retrofit counts by fixture code.
- Post retrofit lighting levels shall be measured to verify compliance with the contract standards.

SPECIFIC MEASUREMENT AND VERIFICATION PLAN

“OPTION A” FOR HVAC SYSTEMS INSTALLATION

Introduction

This Measurement and Verification Plan (M&V) is specific to the installation of new high efficiency HVAC units at the sites listed in the Table of Recommended Measures located at the beginning of this Attachment.

M&V Protocol

For this ECM, IPMVP Protocol – Option A shall be utilized. This option shall provide for the measurement of at least one variable pre and post retrofit with other variables allowed for stipulation. For this retrofit, field data shall be collected which includes, unit counts, unit tonnage, nameplate horsepower and efficiency rating for each existing HVAC system.

Stipulated Values

Hours of Operation, heating/cooling loads and runtime hours of the existing HVAC systems are stipulated for purposes of M & V. Please refer to Attachment C, HVAC Standards of Operation in this agreement for specific operating hours and runtime hours for each HVAC unit or area. Stipulated values are agreed to by Purchaser.

Calculations

The calculations for the baseline energy consumption and post-retrofit savings provide the basis for the overall financial viability of these ECM's. The following equations summarize the calculation of savings:

Electric (kWh) Savings

The electrical usage reduction of this ECM is determined by the following equation:

$$((\text{Size of Existing HVAC Unit}) \times (\text{Unit Efficiency}) \times (\text{Stipulated Load Factor}) - (\text{Size of New Cooling Unit}) \times (\text{Unit Efficiency}) \times (\text{Stipulated Load Factor})) \times (\text{Annual Operating Hours}) = \text{kWh Savings}$$

Dollar Savings

After calculating the kWh saved, the specific facility's average cost per kilowatt hour shall be used to determine dollar savings.

$$(\text{kWh saved}) \times (\text{average kWh rate}) = \$ \text{kWh saved}$$

$$(\$ \text{kWh saved}) = \text{Total dollars saved}$$

Operational Savings

The Purchaser will realize maintenance and operational savings resulting from the new system installations, extended warranties, and/or service agreements provided by Climatec LLC. The operational savings are agreed to be met upon the completed installation of the energy retrofit contract.

Pre Retrofit Measurements

None required for this ECM.

Post Retrofit Measurements

None required for this ECM.

Adjustments

None required for this ECM.

Commissioning

Commissioning shall consist of inspections, and a final Commissioning report. The Inspections and Report shall consist of:

- Commissioning of the newly installed HVAC equipment shall include verification that each new unit is operating, as specified, in all modes (heat/cool).

SPECIFIC MEASUREMENT AND VERIFICATION PLAN

“OPTION A” FOR HVAC CONTROLS UPGRADE

Introduction

This Measurement and Verification Plan (M&V) is specific to the energy management system upgrades at the sites listed in the Table of Recommended Measures located at the beginning of this Attachment.

M&V Protocol

For this ECM, IPMVP Protocol – Option A shall be utilized. This option shall provide for the measurement of at least one variable pre and post retrofit with other variables allowed for stipulation. The cooling and heating setpoints during occupied and unoccupied modes of the HVAC equipment will be verified and documented. For this retrofit, field data shall be collected which includes, unit counts, unit tonnage, nameplate horsepower, efficiency rating, operating schedules, cooling and heating temperature setpoints for each HVAC system.

Stipulated Values

Hours of operation and heating/cooling load factors are stipulated for purposes of M&V. Please refer to the Attachment C, HVAC Standards of Operations for specific existing and proposed operating hours for each HVAC unit or area. Stipulated values are agreed to by Purchaser.

Calculations

The calculations for the baseline energy consumption and post retrofit savings provide the basis for the overall financial viability of these ECM's. Post-retrofit operating schedules and trend reports will be used to verify the inputs such as operating hours, cooling/heating temperature setpoints that are used in the calculations to validate the savings. The following equations summarize the calculation of savings:

Electric (kWh) Savings

The electrical usage reduction of this ECM is determined by applying the stipulated runtime reduction to the calculated energy usage of the HVAC unit.

(Size of HVAC unit) x (Unit efficiency) x (Stipulated load factor) x (Existing annual operating hours – Proposed annual operating hours) = kWh savings

Natural Gas (Therms) Savings

The natural gas usage reduction of this ECM is determined by applying the stipulated runtime reduction to the calculated energy usage of the HVAC unit.

(Size of Heating unit) x (Unit efficiency) x (Stipulated load factor) x (Existing annual operating hours – Proposed annual operating hours) = Therm savings

Dollar Savings

After calculating the kWh saved and the Therms saved, the specific facility's average cost per kilowatt hour and the average cost per Therm of natural gas shall be used to determine dollar savings.

(kWh saved) x (average kWh rate) = \$ kWh saved
 (Therms saved) x (average Therm rate) = \$ Therms saved
 (\$ kWh saved) + (\$ Therms saved) = Total dollars saved

Operational Savings

The Purchaser will realize maintenance and operational savings resulting from the new system installations, extended warranties, and/or service agreements provided by Climatec LLC. The operational savings are agreed to be met upon the completed installation of the energy retrofit contract.

Pre Retrofit Measurements

Existing operating hours and cooling/heating temperature setpoints for each HVAC unit or area will be obtained from current thermostats/EMS.

Post Retrofit Measurements

Post-retrofit operating schedules, cooling and heating temperature setpoints in both occupied and unoccupied modes for the HVAC equipment will be obtained using the new controls system.

Adjustments

For this ECM the following adjustments are allowed for purposes of Measurement and Verification:

- Addition or subtraction to the conditioned square footage of facilities.
- Utility rates, billing days or degree days.
- Equipment changes.
- Increase or decrease in facility usage as associated with daily occupancy times and special events.

Commissioning

Commissioning shall consist of inspections, and a final Commissioning report. The Inspections and Report shall consist of:

- Commissioning of the newly installed energy management system (EMS) shall include verification that the operating schedules, cooling and heating temperature set points and the control sequences for the HVAC equipment have been programmed as specified.

Attachment “B”

Utility Baseline Summary

Energy Baseline

			Utility Baseline Summary		
Town of Chino Valley			4/1/2015	through	3/30/2016
Site Name	Address	Square Footage	Dollars Electric	kWh	\$ / kWh
Animal Control	1950 Voss Dr, Chino Valley, AZ 86323	1,500	\$2,036	10,780	\$0.189
Community Center	1527 N Road 1 East Chino Valley, AZ 86323	4,004	\$2,036	10,780	\$0.189
Court Building	1985 N Road 1 West Chino Valley, AZ 86323	3,544	\$4,685	24,880	\$0.188
Library	1020 W Palomino Rd. Chino Valley, AZ 86323	6,476	\$4,709	26,942	\$0.175
Old Food Bank Bldg - did PD take over?	1943 Voss Dr. Chino Valley, AZ 86323	1,242	\$19,100	102,880	\$0.186
Police Department	1950 Voss Dr, Bldg #301 Chino Valley, AZ 86323	2,839	\$2,159	11,375	\$0.190
Police Dept - Shooting Range - confirm	2178 Sgt Dee Barnes Way Chino Valley, AZ 86323		\$10,781	68,330	\$0.158
Pool - Aquatics Bldg & Ball Fields	1615 N Road 1 East Chino Valley, AZ 86323	7,091	\$2,944	15,320	\$0.192
Public Works	1982 Voss Dr Chino Valley, AZ 86323	3,923	\$40,189	190,240	\$0.211
Roads Dept	2204 Old Home Manor Dr. Chino Valley, AZ 86323	1,792	\$5,564	30,560	\$0.182
Senior Center / Well	1021 W Butterfield Rd. Chino Valley, AZ 86323	4,524	\$1,520	6,000	\$0.253
Shop / Police Dept Mobile	1910 Voss Dr. Chino Valley, AZ 86323	2,975	\$14,109	80,280	\$0.176
Town Hall	202 N Highway 89 Chino Valley, AZ 86323	5,256	\$6,347	35,280	\$0.180
Waste Water Treatment Plant	2190 Rodeo Dr. Chino Valley, AZ 86323		\$11,637	70,720	\$0.165
Parks	Various		\$97,194	924,000	\$0.105
Street Lights / Traffic Signals	Various		\$4,319	10,452	\$0.413
Bright Star Pumps / Wells	Various		\$8,420	40,035	\$0.210
Country West Pumps / Wells	853 N. Highway 89 Chino Valley, AZ 86323		\$46,346	189,120	\$0.245
Other Pumps / Wells	Various		\$9,922	30,560	\$0.325
Cameron Property (Paulden) - vacant	2440 N Troy Lane Paulden, AZ 86334		\$19,687	108,183	\$0.182
Unknown	2998 N State Route 89 Chino Valley, AZ		\$4,037	26,380	\$0.153
Project Total		45,166	\$318,568	2,018,093	\$0.16

Attachment “C”

Standards of Operation for HVAC & Lighting

STANDARDS OF OPERATION:

The hours of operation for the Purchaser's Lighting and HVAC systems, located on the following pages, were used to calculate the energy savings in the Savings Summary section of this agreement and will be used in all measurement and verification calculations.

Town of Chino Valley HVAC Standard of Operations					
Facility	Control System	Days of Week	Daily HVAC Schedule		Temperature Setpoints
			Start Time	Stop Time	Cooling
					Heating
Animal Control	Push to Run*	Mon - Thurs	9:00 AM	2:00 PM	All Areas: Occupied Setpoint: 76°F Unit will operate at 2 hour increments
Community Center	Push to Run*		Events only		All Areas: Occupied Setpoint: 68°F Unit will operate at 2 hour increments
Court Building	Network T-Stat	Mon - Thurs	7:30 AM	5:00 PM	All Areas: Occupied Setpoint: 76°F Unoccupied Setpoint: 85°F Occupied Setpoint will have ± 2°F Local Adjustability System will register room as unoccupied setpoint if no motion is detected for 30 min
Library	Network T-Stat	Mon - Fri. Weekend	8:30 AM Sat 10 AM - 2 PM	6:00 PM	All Areas: Occupied Setpoint: 76°F Unoccupied Setpoint: 85°F Occupied Setpoint will have ± 2°F Local Adjustability System will register room as unoccupied setpoint if no motion is detected for 30 min
Police Department	Network T-Stat	Mon - Sun.	24/7		All Areas: Occupied Setpoint: 76°F Unoccupied Setpoint: 85°F Occupied Setpoint will have ± 2°F Local Adjustability System will register room as unoccupied setpoint if no motion is detected for 30 min
Pool - Aquatics Bldg & Ball Fields	Push to Run*	Mon. - Sun Seasonal**	5:30 AM	9:00 PM	All Areas: Occupied Setpoint: 76°F Unit will operate at 2 hour increments
Public Works	Network T-Stat	Mon - Thurs	7:30 AM	5:00 PM	All Areas: Occupied Setpoint: 76°F Unoccupied Setpoint: 85°F Occupied Setpoint will have ± 2°F Local Adjustability System will register room as unoccupied setpoint if no motion is detected for 30 min
Roads Dept	Push to Run*	Mon - Thurs	7:30 AM	5:30 PM	All Areas: Occupied Setpoint: 76°F Unit will operate at 2 hour increments
Senior Center / Well	Network T-Stat	Mon - Fri.	8:00 AM	5:00 PM	All Areas: Occupied Setpoint: 76°F Unoccupied Setpoint: 85°F Occupied Setpoint will have ± 2°F Local Adjustability System will register room as unoccupied setpoint if no motion is detected for 30 min
Shop / Police Dept Mobile	Push to Run*	Mon - Thurs	7:30 AM	5:00 PM	All Areas: Occupied Setpoint: 76°F Unit will operate at 2 hour increments
Town Hall	Network T-Stat	Mon - Thurs Fri.	8:00 AM 8:00 AM	5:00 PM 12:00 PM	All Areas: Occupied Setpoint: 76°F Unoccupied Setpoint: 85°F Occupied Setpoint will have ± 2°F Local Adjustability System will register room as unoccupied setpoint if no motion is detected for 30 min

* HVAC control system to be operated manually. Reference schedules are the expected building occupancy.

** Operates between late March and Early September

Town of Chino Valley	Lighting Standards of Operations													
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Space Usage	Animal Control	Community Center	Court Building	Library	Old Food Bank Bldg	Police Department	Pool - Aquatics Bldg & Ball Fields	Public Works	Roads Dept	Senior Center / Well	Shop / Police Dept Mobile	Town Hall	Waste Water Treatment Plant	Parks	Street Lights / Traffic Signals	Bright Star Pumps / Wells	Country West Pumps / Wells
24/7						8760											
Admin Open Area	2200	1500	1500	2500	800	3500	1500	2800	900	2800	2500	2500	2300			800	300
Dusk/Dawn	4380	4380	1460	4380	4380	4380	4380	4380	3800	4380	4380	4380	4380	4380	4380	4380	4380
Kitchen		800					1200			2800							
Library				2500													
Mech/Elec		300					500	800	900	800							
Office Admin		1500	1500	1800		2500	1500	2150		2200	1800	1800					
Private Restroom			500	500	500	500		500	500								
Restroom		800	1500	1500			1200			1500	800	1500		2000			



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. b.

Meeting Date: 08/09/2016
Contact Person: Cecilia Grittman, Assistant Town Manager
 Phone: 928-636-2646 x-1202
Department: General Services
Item Type: Action Item - Presentation
Estimated length of staff presentation: 10 minutes
Physical location of item: Chino Valley Chamber of Commerce, 175 E Road 2 South

AGENDA ITEM TITLE:

Consideration and possible action to approve the First Amendment to Accountability Contract and Scope of Services, between the Town of Chino Valley and the Chino Valley Area Chamber of Commerce for FY 16/17 in an amount of Thirty-Eight Thousand (\$38,000.00) dollars. (Cecilia Grittman, Assistant Town Manager)

RECOMMENDED ACTION:

Move to approve the First Amendment to Accountability Contract and Scope of Services between the Town of Chino Valley and the Chino Valley Area Chamber of Commerce for FY 16/17 in the amount of Thirty-Eight Thousand (\$38,000.00) dollars.

SITUATION AND ANALYSIS:

On October 13, 2015 the Town and the Chino Valley Area Chamber of Commerce entered into an Accountability Contract for services. The Agreement automatically renews for up to five (5) years, with the Scope of Services being updated annually to reflect the needs of the Town and the available resources and strengths of the Chino Valley Chamber. The Scope of Services has been created through a cooperative effort between Town of Chino Valley staff and the Chamber's Executive Director and Board President.

The Chamber is a strong resource to support local businesses and help to grow the local economy. The Chamber works cooperatively with the Town's economic development efforts to secure business and economic development improvements for the community and the region. The Scope of Work reflects the cooperative efforts between the two entities.

Fiscal Impact

Fiscal Impact?: Y
If Yes, Budget Code: 38,000.00
Available:

Funding Source:

Attachments

First Amendment to Accountability Contract
FY 2016/2017 Scope of Work

FIRST AMENDMENT
TO
ACCOUNTABILITY CONTRACT BETWEEN THE TOWN OF CHINO VALLEY, ARIZONA
AND
CHINO VALLEY CHAMBER OF COMMERCE

This First Amendment to the Accountability Contract between the Town of Chino Valley and the Chino Valley Chamber of Commerce is made and entered into this ____ day of August, 2016, with an Effective Date of July 1, 2016 by and between the Town of Chino Valley, a municipal corporation of the State of Arizona (the "Town") and Chino Valley Chamber of Commerce, an Arizona non-profit corporation (the "Chamber"). Town and Chamber are collectively referred to herein as the "Parties".

I. RECITALS

A. The Parties entered into an Accountability Contract effective October 13, 2015 (the "Contract") through June 30, 2016 and automatically renewing each year for up to five (5) successive one-year terms, effective July 1 of each successive year. The Parties are, therefore, in the first renewal year at the time of this First Amendment.

B. The Parties desire to make changes to their obligations by adopting a new Scope of Work for fiscal year 2016-2017.

II. AGREEMENTS

Now, therefore, in consideration of the agreements and promises hereinafter set forth and those set forth in the Contract, the Parties agree to amend the Contract as follows:

1. Section 3 Scope of Services is amended as follows:

3.1 Chamber Responsibilities. Chamber agrees to use funds received from Town to provide Visitor Center and services ("Scope of Services"), as set forth in Exhibit B, which is attached hereto and incorporated herein and to use the funds from the Town for those purposes only. Chamber also agrees to maintain accurate financial records to enable Town to verify that the funds provided under this Agreement are expended in accordance with this Agreement. Chamber shall be responsible for compliance with all applicable federal, state and local laws and regulations.

3.2 Town Responsibilities. Town shall:

3.2.1 Pay the match portion (a total of \$1820.50 in total) of the match grant received by Chamber from the Arizona Office of Tourism m for the 2016-2017 fiscal year.

3.2.2 Provide Chamber with new and renewed business license information monthly and, as available, provide Chamber with other pertinent economic development information.

3.2.3 Act as a pass-through agent for and, at its discretion, otherwise partner with Chamber in seeking and applying for grant funds through USDA and similar agencies.

3.2.4 Assist the Chamber, if needed, by providing statistical information or gathering necessary information for grant applications, if the Town has access to or collects such information.

3.2.5 Provide to the Chamber a used computer to facilitate Chamber's program to provide assistance to small businesses.

3.2.6 Not produce events that compete with the Chamber Fall Fest and Chino Valley Heritage Festival events.

3.2.7 In the Town's sole discretion and in compliance with its internet and social media policies, include Chamber events on its calendar and website.

3.2.8 Upon request by Chamber, disclose to Chamber any information that pertains to the business community that may be reasonably, legally and practically released.

2. The "Provisions of Agreement FY 15-16 Scope of Services", attached to the Contract as Exhibit A, is hereby superseded and replaced by the "Provisions of Agreement Fiscal Year 2016-2017 Scope of Services", attached to this First Amendment as Exhibit B.

Except as amended above, all other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties have executed this First Amendment to the Accountability Contract between the Town of Chino Valley and the Chino Valley Chamber of Commerce, effective October 13, 2015, which shall become effective retroactively to July 1, 2016.

THE TOWN OF CHINO VALLEY

Chino Valley Chamber of Commerce

By: _____
Chris Marley, Mayor

By: _____
Arlene Alen, CEO

ATTEST:

Jami Lewis, Town Clerk

EXHIBIT B
Provisions of Agreement Fiscal Year 2016-2017
Scope of Services

The Town of Chino Valley agrees to tender to the Chino Valley Area Chamber of Commerce (“CVACC” or “Chamber”) the sum of Thirty-Eight thousand dollars (\$38,000.00) for services delineated and outlined in this Agreement.

Now, therefore, in consideration of the mutual promises and covenants of the parties, and other good and valuable consideration, the parties agree as follows:

1. Visitor Center

The Chamber will maintain and staff the Visitor Center located within the Town limits. The Visitor Center will abide by the criteria set forth by the Arizona Office of Tourism (“AOT”) to be a State-designated Local Visitor Information Center (“LVIC”). The Visitor Center will be open to the public during normal working hours and staffed adequately to answer all correspondence, telephone, e-mail, or walk-in inquiries for general information relating to Chino Valley. The Visitor Center will be closed on posted Chamber holiday observances; however, a 24/7 kiosk on Chamber premises will be available with community information.

2. Promotion / Marketing

The Chamber will continue or begin the following promotion and marketing activities:

- a. Distribute relocation / community guides and maps of the Chino Valley area in coordination with the Town and its GIS division and / or other sources, some of which sources may be members of the Chamber.
- b. Provide an opportunity for the Town to host one “Talk of the Town – Chino Valley,” radio show per month.
- c. Maintain “Platinum Sponsorship” for the Town of Chino Valley at all Chamber events.
- d. Continue to expand Visitor Center services and act as resource to visitors and persons who have relocated to the area.
- e. Continue to work with the AOT office in administering the AOT grant and producing banner ads.
- f. Continue to promote and work to expand the “Shop Local” program in conjunction with Prescott and Prescott Valley.
- g. Continue to promote and enhance the Chamber’s Small Business Saturday Campaign.
- h. Continue to support the Google program, “Put Chino Valley on the Map.” to provide assistance, resources and education for small businesses at various program sessions.
- i. Ensure that all promotional and printed materials created and distributed by the Chamber with funds from the Town contain a statement recognizing and acknowledging that funding has been provided from the Town for such documents.

3. Economic Development

In order to maintain fairness between the industries and retail businesses inside the Town, the Chino Valley Chamber of Commerce shall practice the concept of being community focused. The Chamber's mission is to promote economic growth and serve as a voice for the business community to enhance the quality of life for Chino Valley.

The Chamber will continue or begin the following economic development activities:

- a. Coordinate with Town and other economic development organizations including Northern Arizona Council of Governments, Prescott Valley Economic Development Foundation, Greater Prescott Regional Economic Partnership, and Yavapai College to represent the Chino Valley business sector and to foster business development in the Town.
- b. Work with the Town in economic development efforts, focusing on opportunities to increase jobs and if possible, enhance the balance of the retail businesses, restaurants, nightlife, and social activities to attract families, visitors, and residents to live and shop in Chino Valley.
- c. Conduct workshops and classes and post surveying community or business needs on topics benefitting or of interest to the business community.
- d. In conjunction with the Town, Yavapai College, and other organizations, incorporate a Small Business Resource Center ("SBRC").
- e. Assist small businesses navigating through the start-up processes, which may include partnering with the Town's Development Services and Public Works departments regarding permitting and licensing processes, or assisting the small businesses with various state or federal agencies.

4. Partnering with the Town

In addition to the scope of work listed above, the Chamber further agrees, through its partnership with the Town, to perform the following functions:

- a. Give Quarterly reports to the Chino Valley Town Council.
- b. Upon request, the Chamber Board will participate in an annual joint meeting with the Town Council.
- c. With the Town, jointly conduct a "Citizen's Academy" annually.
- d. Upon request, the Chamber Chief Executive Officer will meet with new Town Councilmembers, at the CVACC facility to provide the incoming Councilmembers with information about the Chamber's activities and work on behalf of the Town as set forth in this Agreement and other matters related to the Town's economic development.
- e. In conjunction with the Town's technology department, where appropriate, explore the feasibility of the following:
 1. Integrating event calendars;
 2. Linking websites;
 3. Mapping – possibility of using Town data for a) business map, b) street maps
- f. Continue to develop concepts and implementation strategies for Town and Chamber events. Efforts will include leveraging some existing, recurring events to increase the intensity of such events as well as enhance visitation and tourism; promotion and contact with local businesses, regardless of membership status, to explore and facilitate expansion of recurring events.

- g. Produce CVACC Fall Fest and Chino Valley Heritage Festival in the spring, respectively, as Community Development events, and participate at some level in Town events. Participation in Town events can include inclusion on calendar, website, e-mail blasts, and other levels of participation.
- h. Where appropriate, participate in Town planning efforts such as General Plan updates and amendments to Town Codes and Ordinances and solicit feedback from the business sector on such proposed amendments.
- i. As appropriate, provide feedback on project proposals brought before the Town Council for consideration or approval.
- j. As appropriate and as resources are available, work with the Town's Recreation department to enhance resources and communication facilitate streamlining planning for Town and Chamber events.

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TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. c.

Meeting Date: 08/09/2016
Contact Person: Joe Duffy, Finance Director
 Phone: 928-636-2646 x-1211
Department: Finance
Item Type: Action Item - Presentation
Estimated length of staff presentation: 10 minutes
Physical location of item: N/A

AGENDA ITEM TITLE:

Consideration and possible action to approve Financial Report for the twelve months ending June 30, 2016. (Joe Duffy, Finance Director)

RECOMMENDED ACTION:

Approve Financial Report for the twelve months ending June 30, 2016.

SITUATION AND ANALYSIS:

The Finance Department prepares Financial Reports for the Mayor, Council, Staff and Community.

Upon Council approval, the reports will be posted on the Town's website.

The report includes the following sections:

Revenue and Expense Summary - This section details the Revenues and Expenditures of each fund. Comparing the year to date figures to the current year's annual budget and the prior year's month to date figures.

Major Revenue Summary - This section details the year to date figures for the Town's eight major revenue sources that account for 60% of the Town's Revenue.

Other Information - This section details other pertinent financial and statistical information including the Impact Fee Fund balance and the amount of General Fund Contingencies that have been allocated this fiscal year and a debt summary.

The Finance Director will supplement these reports with periodic presentations and other information throughout the fiscal year.

The report through June 30, 2016 is preliminary and tentative prior to the annual audit being completed.

Fiscal Impact**Fiscal Impact?:** No**If Yes, Budget Code:****Available:****Funding Source:**

AttachmentsFinancial Report ending June 30, 2016

Town of Chino Valley

Arizona

Financial Report



To The Town Council

For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year

Town of Chino Valley						
Revenue and Expense Summary						
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year						
			Actual vs Prior Year			
	Actual Year to Date FY 2014-15	Actual Year to Date FY 2015-16	Amount	% FY 2015-16/ FY 2014-15	Annual Budget FY 2015-16	% of Budget YTD
GENERAL FUND						
General Fund Revenues by Category						
Franchise Taxes	\$ 125,124	\$ 136,537 *	\$ 11,413	9%	\$ 134,500	102%
Tax Revenues	\$ 3,763,816	\$ 3,984,315	\$ 220,499	6%	\$ 3,904,000	102%
Licenses & Permits	\$ 275,407	\$ 351,009	\$ 75,602	27%	\$ 260,000	135%
Intergovernmental	\$ 3,119,679	\$ 3,158,509	\$ 38,830	1%	\$ 3,189,500	99%
Charges for Services	\$ 94,269	\$ 123,567	\$ 29,298	31%	\$ 108,000	114%
Fines and Forfeitures	\$ 138,374	\$ 149,759	\$ 11,385	8%	\$ 140,000	107%
Other Revenues	\$ 8,227	\$ 5,559	\$ (2,668)	-32%	\$ 1,500	371%
Contributions and Donations	\$ 1,999	\$ 2,556	\$ 557	28%	\$ 3,500	73%
Investment Earnings	\$ 1,344	\$ 4,107	\$ 2,763	206%	\$ 500	821%
Transfers In	\$ 110,000	\$ 260,000	\$ 150,000	136%	\$ 310,000	84%
Total Revenues	\$ 7,638,239	\$ 8,175,918	\$ 537,679	7%	\$ 8,051,500	102%
* Estimated final quarter accruals.						
Total Revenues for the General Fund are up \$537,679 over the previous fiscal year. Licenses and Permits are up 27% due to an increase in Building Permits and Plan Check Fees this fiscal year. Transfers In were increased in the current years budget over the prior year. The total General Fund Revenues are up 7% compared to the last fiscal year.						

Town of Chino Valley						
Revenue and Expense Summary						
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year						
			Actual vs Prior Year			
	Actual Year to Date FY 2014-15	Actual Year to Date FY 2015-16	Amount	% FY 2015-16/ FY 2014-15	Annual Budget FY 2015-16	% of Budget YTD
General Fund Expenditures by Department						
Prosecutor	\$ 121,689	\$ 128,741	\$ 7,052	6%	\$ 130,600	99%
Town Clerk	\$ 206,652	\$ 216,159	\$ 9,507	5%	\$ 197,600	109%
Town Manager	\$ 415,038	\$ 397,008	\$ (18,030)	-4%	\$ 392,500	101%
Human Recourses	\$ 97,924	\$ 190,746	\$ 92,822	95%	\$ 195,300	98%
Municipal Court	\$ 313,761	\$ 253,257	\$ (60,504)	-19%	\$ 261,900	97%
Finance	\$ 306,953	\$ 333,861	\$ 26,908	9%	\$ 329,200	101%
Management Information System	\$ 225,993	\$ 229,807	\$ 3,814	2%	\$ 273,600	84%
Mayor and Council	\$ 18,265	\$ 26,612	\$ 8,347	46%	\$ 33,000	81%
Planning	\$ 156,880	\$ 178,992	\$ 22,112	14%	\$ 186,300	96%
Building Inspection	\$ 270,679	\$ 261,404	\$ (9,275)	-3%	\$ 277,100	94%
Police	\$ 2,567,283	\$ 2,546,918	\$ (20,365)	-1%	\$ 2,651,800	96%
Animal Control	\$ 126,028	\$ 114,720	\$ (11,308)	-9%	\$ 123,300	93%
Recreation	\$ 23,641	\$ 68,232	\$ 44,591	189%	\$ 63,800	107%
Library	\$ 298,489	\$ 311,125	\$ 12,636	4%	\$ 309,600	100%
Senior Center	\$ 226,901	\$ 242,981	\$ 16,080	7%	\$ 242,400	100%
Parks Maintenance	\$ 340,866	\$ 397,619	\$ 56,753	17%	\$ 333,200	119%
Aquatic Center	\$ 208,542	\$ 210,219	\$ 1,677	1%	\$ 244,900	86%
Facilities Maintenance	\$ 317,879	\$ 361,997	\$ 44,118	14%	\$ 345,900	105%
Fleet Maintenance	\$ 261,967	\$ 220,629	\$ (41,338)	-16%	\$ 341,000	65%
Engineering	\$ 62,467	\$ 147,015	\$ 84,548	135%	\$ 122,000	121%
Non Departmental	\$ 537,220	\$ 627,244	\$ 90,024	17%	\$ 996,500	63%
Total Expenditures	\$ 7,105,117	\$ 7,465,286	\$ 360,169	5%	\$ 8,051,500	93%
Total Revenue Over (Under)						
Total Expenditures	\$ 533,122	\$ 710,632	\$ 177,510		\$ -	
GENERAL FUND (Continued)						
Total General Fund Expenditures are up \$360,169 or 5% compared to last fiscal year. Through June each department should be less than 100%. In total the General Fund Departments are at 93% and \$586,214 under budget.						

Town of Chino Valley						
Revenue and Expense Summary						
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year						
			Actual vs Prior Year			
	Actual Year to Date FY 2014-15	Actual Year to Date FY 2015-16	Amount	% FY 2015-16/ FY 2014-15	Annual Budget FY 2015-16	% of Budget YTD
HIGHWAY USER REVENUE FUND						
Total Revenues	\$ 866,913	\$ 934,751	\$ 67,838	8%	\$ 1,014,000	92%
Expenditures						
Road Maintenance	\$ 1,178,288	\$ 845,267	\$ (333,021)	-28%	\$ 1,014,000	83%
Total Revenue Over (Under)						
Total Expenditures	\$ (311,375)	\$ 89,484	\$ 400,859		\$ -	
Total Fund Revenues are up 8% over the prior fiscal year due to the budgeted increase in HURF fund distributions. Expenditures are down 28% primarily due to the Perkinsville Roundabout payment of \$150,000 made in FY 2014-15.						
WATER ENTERPRISE FUND						
Water Revenues	\$ 508,115	\$ 602,494	\$ 94,379		\$ 5,038,000	
Transfers In	\$ 280,700	\$ 150,000	\$ (130,700)		\$ 150,000	
Total Revenues	\$ 788,815	\$ 752,494	\$ (36,321)	-5%	\$ 5,188,000	15%
Expenditures						
Water Utility Operations	\$ 737,330	\$ 473,784	\$ (263,546)		\$ 484,200	
Debt Service/Reserve	\$ 25,879	\$ 24,713	\$ (1,166)		\$ 4,646,000	
Total Expenditures	\$ 763,209	\$ 498,497	\$ (264,712)	-35%	\$ 5,130,200	10%
Total Revenue Over (Under)						
Total Expenditures	\$ 25,606	\$ 253,997	\$ 228,391		\$ 57,800	
Total Water Enterprise Fund Revenues are down 5% due to reduced budgeted transfers in from the Capital Improvement Fund. Water Service Fees are up 20% primarily due to an increase in active accounts and usage by the Parks Department. Expenditures are down 35% over last fiscal year.						
SEWER ENTERPRISE FUND						
Total Revenue	\$ 1,524,865	\$ 1,541,461	\$ 16,596	1%	\$ 2,204,200	70%
Expenditures						
Sewer	\$ 872,444	\$ 878,008	\$ 5,564		\$ 751,200	
Debt Service/Reserve	\$ 492,139	\$ 406,561	\$ (85,578)		\$ 1,453,000	
Total Expenditures	\$ 1,364,583	\$ 1,284,569	\$ (80,014)	-6%	\$ 2,204,200	58%
Total Revenue Over (Under)						
Total Expenditures	\$ 160,282	\$ 256,892	\$ 96,610		\$ -	
Total Sewer Enterprise Fund Revenues are up 1% over last fiscal year. Sewer Buy In fees are down but offset by a 5% increases in Sewer Service Fees. Operating expenses are flat even with the additional personal costs and maintenance and repair expenses bringing the plant up to the Town's standards. Debt Service/Reserve is down due to the debt refinancing completed over the last couple of years.						

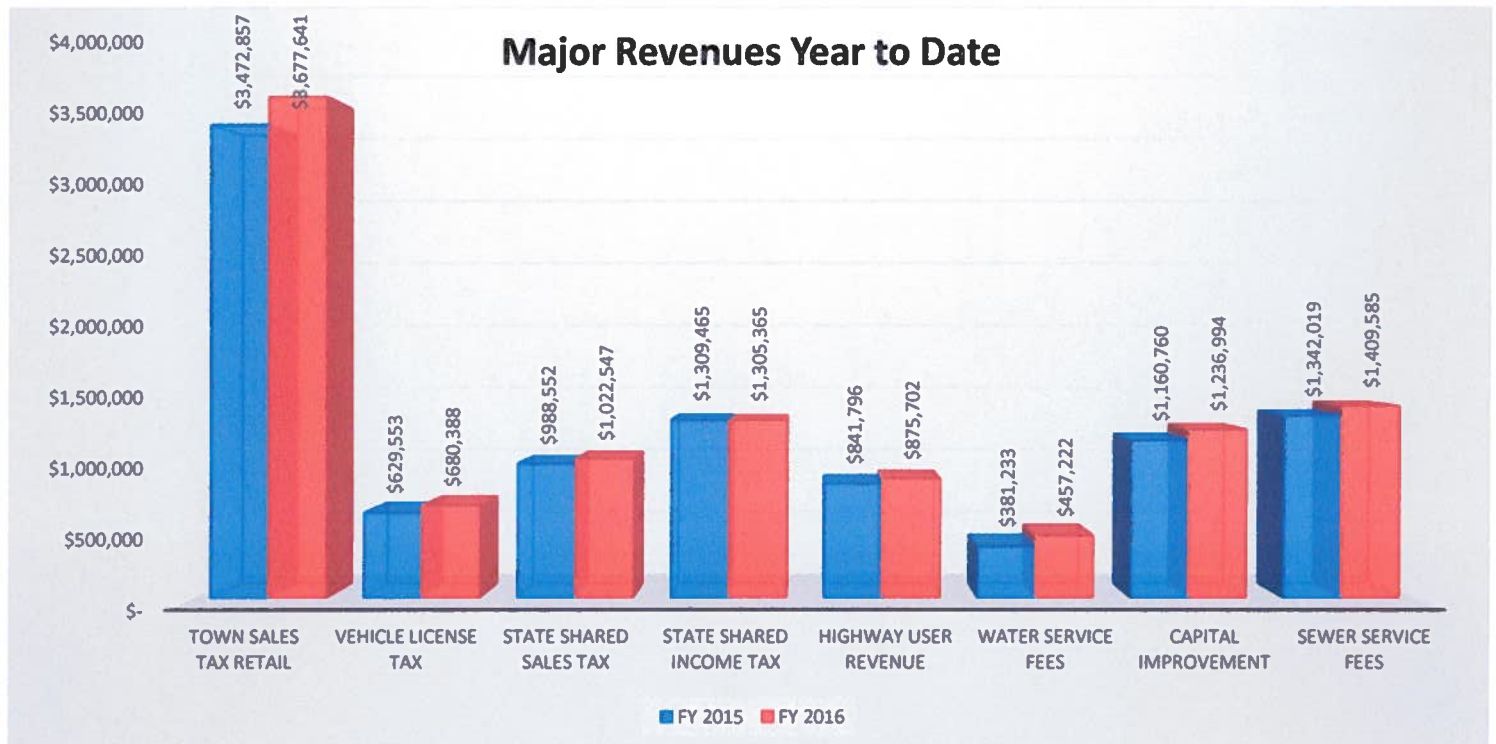
Town of Chino Valley						
Revenue and Expense Summary						
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year						
			Actual vs Prior Year			
	Actual Year to Date FY 2014-15	Actual Year to Date FY 2015-16	Amount	% FY 2015-16/ FY 2014-15	Annual Budget FY 2015-16	% of Budget YTD
CAPITAL IMPROVEMENT FUND						
Total Revenues	\$ 1,257,459	\$ 1,339,787	\$ 82,328	7%	\$ 4,060,500	33%
Lease Purchase Proceeds	\$ 607,448	\$ -	\$ (607,448)			
Yavapai Drainage District	\$ 150,000	\$ 628,263	\$ 478,263		\$ 529,000	
Road Impact Fees	\$ 780,347	\$ 20,749				
Capital Improvements	\$ 901,768	\$ 836,258	\$ (65,510)		\$ 3,304,000	
Equipment Acquisition	\$ 607,448		\$ (607,448)			
Transfers	\$ 1,185,132	\$ 1,137,000	\$ (48,132)		\$ 1,137,000	
Total Expenditures	\$ 2,694,348	\$ 1,973,258	\$ (721,090)	-27%	\$ 4,441,000	44%
Total Revenue Over (Under)						
Total Expenditures	\$ 100,906	\$ 15,541	\$ 674,233		\$ 148,500	
Capital Improvement Fund Tax Revenues are up by 7% over the prior fiscal year primarily due to an increase in Sales Tax activity. Transfers are down due to the decreased amount budgeted this fiscal year. Capital Improvements include the Chino Meadows Unit 5 at Peavine drainage project being constructed this fiscal year.						

Town of Chino Valley						
Revenue and Expense Summary						
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year						
			Actual vs Prior Year			
	Actual Year to Date FY 2014-15	Actual Year to Date FY 2015-16	Amount	% FY 2015-16/ FY 2014-15	Annual Budget FY 2015-16	% of Budget YTD
OTHER MINOR FUNDS						
Other Minor Funds -Revenues						
CDBG Grant	\$ 266,693	\$ -	\$ (266,693)			
Grants Fund	\$ 367,511	\$ 281,219	\$ (86,292)		\$ 3,385,000	
Special Revenue Fund Court	\$ 10,024	\$ 14,537	\$ 4,513		\$ 38,500	
Capital Asset Replacement	\$ 60,485	\$ 53,936	\$ (6,549)		\$ 10,000	
Police Impact Fee Funds	\$ 435	\$ 12,433	\$ 11,998		\$ 63,000	
Library Impact Fee Funds	\$ 16,562		\$ (16,562)			
Parks/Rec Impact Fee Funds	\$ 26	\$ 41	\$ 15		\$ 16,000	
Roads Impact Fee Funds	\$ 3,285	\$ 1,357	\$ (1,928)		\$ 529,000	
Special Revenue Fund PD	\$ 59,815	\$ 61,389	\$ 1,574		\$ 45,000	
CVSLID Districts	\$ 4,028	\$ 3,993	\$ (35)		\$ 4,000	
Total Revenues	\$ 788,864	\$ 428,905	\$ (359,959)	-46%	\$ 4,090,500	10%
CDBG Grant	\$ 266,693		\$ (266,693)			
Grants Funds	\$ 293,768	\$ 338,151	\$ 44,383		\$ 3,385,000	
Special Revenue Fund - Court	\$ 14,947	\$ 39,375	\$ 24,428		\$ 38,500	
Capital Replacement Fund	\$ 6,710	\$ 17,735	\$ 11,025		\$ 10,000	
Police Impact Fee Funds	\$ 69,970	\$ 25,461	\$ (44,509)		\$ 63,000	
Library Impact Fee Funds	\$ 16,562		\$ (16,562)			
Parks/Rec Impact Fee Funds	\$ 22,359		\$ (22,359)		\$ 16,000	
Roads Impact Fee Funds	\$ 780,347		\$ (780,347)		\$ 529,000	
Special Revenue Fund PD	\$ 40,425	\$ 54,038	\$ 13,613		\$ 40,000	
CVSLID Districts	\$ 3,933	\$ 4,178	\$ 245		\$ 4,000	
Total Expenditures	\$ 1,515,714	\$ 478,938	\$ (1,036,776)	-68%	\$ 4,085,500	12%
Total Revenue Over (Under)						
Total Expenditures	\$ (726,850)	\$ (50,033)	\$ 676,817		\$ 5,000	
TOTAL ALL FUNDS						
Total Revenue All Funds	\$ 12,865,155	\$ 13,173,316	\$ 308,161	2%	\$ 24,608,700	54%
Total Expenditures All Funds	\$ 14,621,259	\$ 12,545,815	\$ (2,075,444)	-14%	\$ 24,926,400	50%
Total Revenue Over (Under)						
Total Expenditures All Funds	\$ (1,756,104)	\$ 627,501	\$ 2,383,605		\$ (317,700)	
(1) Budget does not include Carryover Amounts from Prior Fiscal Years						
(2) Year to date amounts include actual expenditures paid to date.						

Town of Chino Valley
Major Revenue Summary
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year

					Actual vs Prior Year	
	Actual Year to Date FY 2014-15	Annual Budget FY 2015-16	Actual Year to Date FY 2015-16	% of Budget YTD	Amount	%
Town Sales Tax Retail	\$ 3,472,857	\$ 3,550,000	\$ 3,677,641	104%	\$ 204,784	6%
Vehicle License Tax	\$ 629,553	\$ 641,000	\$ 680,388	106%	\$ 50,835	8%
State Shared Sales Tax	\$ 988,552	\$ 1,033,000	\$ 1,022,547	99%	\$ 33,995	3%
State Shared Income Tax	\$ 1,309,465	\$ 1,302,000	\$ 1,305,365	100%	\$ (4,100)	0%
Highway User Revenue	\$ 841,796	\$ 843,000	\$ 875,702	104%	\$ 33,906	4%
Water Service Fees	\$ 381,233	\$ 365,000	\$ 457,222	125%	\$ 75,989	20%
Capital Improvement	\$ 1,160,760	\$ 1,304,000	\$ 1,236,994	95%	\$ 76,234	7%
Sewer Service Fees	\$ 1,342,019	\$ 1,450,000	\$ 1,409,585	97%	\$ 67,566	5%
Major Revenues Y.T.D.	\$ 10,126,235	\$ 10,488,000	\$ 10,665,444	102%	\$ 539,209	5%
Total Revenue All Funds	\$ 12,865,155	\$ 24,608,700	\$ 13,173,316	54%	\$ 308,161	2%
	79%	43%	81%			

The Major Revenues are up \$539,209 or 5% over the prior fiscal year in line with the budget projections. Town Sales Tax Retail is up 6% this fiscal year. Water Service Fees are up 20% primarily due to an increase in active accounts and the Parks Department water usage. Total combined revenue for all funds is up 2%.



Impact Fee Fund Recaps					
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year					
	Police Impact Fees	Library Impact Fees	Parks/Rec Impact Fees	Roads Impact Fees	
Beginning Fund Balance @ 6/30/15	\$ 13,254	\$ -	\$ 18,281	\$ 575,032	
Impact Fees Revenue to Date	\$ 12,433	\$ -	\$ 41	\$ 1,358	
Impact Fees Expenditures to Date	\$ 25,461	\$ -	\$ -	\$ 20,749	
Ending Fund Balance to Date	\$ 226	\$ -	\$ 18,322	\$ 555,641	
Budgeted Expenditures FY 15/16	\$ 63,000	\$ -	\$ 16,000	\$ 529,000	
Contingency Funds Budget					
For the Twelve Months Ending June 30, 2016 100% of the Fiscal Year					
	Actual Year to Date FY 2015-16	Annual Budget FY 2015-16			
General Fund Budget		\$ 380,000			
General Fund Balance		\$ 380,000			
HURF Fund Budget		\$ 42,000			
Water Fund Budget		\$ 31,000			
Sewer Fund Budget		\$ 49,000			
Balance of Contingency Budget	\$ -	\$ 502,000			
Annual Debt Service Summary By Fund					
Fiscal Year Ended June 30, 2016					
Debt Issue	Date Issued	Original Amount	Outstanding Amount as of June 30, 2015	FY 2016 Principal	FY 2016 Interest
General Government					
GADA Loan 2007A	7/1/2011	\$ 3,825,000	\$ 3,385,000	\$ 240,000	\$ 162,806
US Bank Series 2010	12/15/2010	\$ 7,280,000	\$ 7,280,000		\$ 331,638
		\$ 11,105,000	\$ 10,665,000	\$ 240,000	\$ 494,444
Water Enterprise Fund					
US Bank Series 2010	12/15/2010	\$ 745,000	\$ 565,000	\$ 45,000	\$ 24,712
Sewer Enterprise Fund					
WIFA	1/10/2007	\$ 1,580,000	\$ 1,012,403	\$ 80,034	\$ 27,922
WIFA	1/11/2008	\$ 4,853,000	\$ 3,496,027	\$ 248,952	\$ 98,378
WIFA	1/1/2015	\$ 2,963,671	\$ 2,841,817	\$ 124,303	\$ 57,121
USDA	2/16/2007	\$ 1,595,000	\$ 1,374,323	\$ 40,329	\$ 55,947
USDA	4/10/2008	\$ 1,505,000	\$ 1,337,955	\$ 36,343	\$ 54,509
USDA	4/16/2008	\$ 1,332,000	\$ 1,185,137	\$ 32,116	\$ 48,284
		\$ 13,828,671	\$ 11,247,662	\$ 562,077	\$ 342,161
Total Town of Chino Valley Debt		\$ 25,678,671	\$ 22,477,662	\$ 847,077	\$ 861,317



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. d.

Meeting Date: 08/09/2016
Contact Person: Joe Duffy, Finance Director
 Phone: 928-636-2646 x-1211
Department: Finance
Item Type: Consent
Estimated length of staff presentation: None
Physical location of item: N/A

AGENDA ITEM TITLE:

Consideration and possible action to approve recommended budget adjustments for the Fiscal Year Ending June 30, 2016. (Joe Duffy, Finance Director)

RECOMMENDED ACTION:

Approve recommended budget adjustments for Fiscal Year Ending June 30, 2016.

SITUATION AND ANALYSIS:

Each fiscal year the Town of Chino Valley officially approves the budget adjustments for any General Fund Departments that are over budget. The Contingency Fund Budget is reduced and each departments budget is increased to cover the budget short fall.

In total the General Fund Departments were under budget by \$586,215.

During the Fiscal Year Ended June 30, 2016, the General Fund had 9 departments over budget by a combined total of 139,798.

Due to the fact this figures and tentative and preliminary and my change prior to the audited financials being prepared, the Finance Director is recommending adjusting the budget per the attached schedule by \$177,500.

Fiscal Impact

Fiscal Impact?: Yes
If Yes, Budget Code: 01955600
Available: 177,500
Funding Source:
 The funds will come out of the contingency line item.

Attachments

Budget Adjustment Worksheet
Budget Adjustment Powerpoint

Town of Chino Valley							
Total Expenditure Summary by Department							
	Description	2015-16 Adopted Budget	Original 2015-16 Budget Estimate	Actual 2015-16 Pre Audit	Amount (Over)/Under Budget	% (Over)/Under Budget	Contingency Fund Amount
GENERAL FUND							
41	PROSECUTOR	130,600	130,600	128,741	1,859	1%	
42	TOWN CLERK	197,600	183,373	216,159	(18,559)	-9%	20,000
43	TOWN MANAGER	392,500	395,000	397,008	(4,508)	-1%	7,500
44	HUMAN RESOURCES	195,300	195,300	190,746	4,554	2%	
45	MUNICIPAL COURT	261,900	254,788	253,257	8,643	3%	
46	FINANCE	329,200	329,200	333,861	(4,661)	-1%	7,500
47	MGMT INFORMATION	273,600	267,900	229,807	43,793	16%	
50	MAYOR AND COUNCIL	33,000	32,500	26,612	6,388	19%	
55	PLANNING	186,300	190,850	178,992	7,308	4%	
56	BUILDING INSPECTION	277,100	262,700	261,404	15,696	6%	
60	POLICE	2,651,800	2,499,661	2,546,918	104,882	4%	
61	ANIMAL CONTROL	123,300	123,300	114,720	8,580	7%	
63	RECREATION	63,800	70,600	68,232	(4,432)	-7%	7,500
64	LIBRARY	309,600	309,455	311,125	(1,525)	0%	5,000
66	SENIOR CENTER	242,400	241,800	242,981	(581)	0%	5,000
68	PARKS MAINTENANCE	333,200	386,870	397,619	(64,419)	-19%	75,000
69	AQUATICS CENTER	244,900	232,902	210,219	34,681	14%	
71	FACILITIES MAINTENANCE	345,900	354,755	361,997	(16,097)	-5%	20,000
73	FLEET MAINTENANCE	341,000	236,807	220,629	120,371	35%	
74	ENGINEERING	122,000	141,841	147,015	(25,015)	-21%	30,000
95	NON DEPARTMENTAL	996,500	653,858	627,244	369,256	37%	
TOTAL GENERAL FUND		8,051,500	7,494,060	7,465,286	586,214	7%	177,500

Town of Chino Valley

Total Expenditure Summary by Department

	Description	2015-16 Adopted Budget	Original 2015-16 Budget Estimate	Actual 2015-16 Pre Audit	Amount (Over)/Under Budget	% (Over)/Under Budget	Contingency Fund Amount
HIGHWAY USER REVENUE FUND							
278	ROAD MAINTENANCE	1,014,000	905,351	845,267	168,733	17%	
CDBG GRANTS							
390	CDBG PROJECTS	-	-	-	-		
WATER ENTERPRISE FUND							
482	WATER UTILITY OPERATION	5,060,200	446,740	473,784	4,586,416	91%	
495	WATER ENTERPRISE FUND EXPS	70,000	70,000	24,713	45,287	65%	
		5,130,200	516,740	498,497	4,631,703	90%	
CAPITAL IMPROVEMENT FUND							
590	MISC CAPITAL PROJECTS	4,441,000	1,953,845	1,973,258	2,467,742	56%	
SEWER ENTERPRISE FUND							
683	SEWER	1,300,200	874,440	878,008	422,192	32%	
695	CAP/DEBT CONTINGENCIES	904,000	770,112	406,561	497,439	55%	
		2,204,200	1,644,552	1,284,569	919,631	42%	
GRANTS FUND							
7	GRANTS	3,385,000	1,100,000	338,151	3,046,849	90%	

Town of Chino Valley							
Total Expenditure Summary by Department							
	Description	2015-16 Adopted Budget	Original 2015-16 Budget Estimate	Actual 2015-16 Pre Audit	Amount (Over)/Under Budget	% (Over)/Under Budget	Contingency Fund Amount
SPECIAL REVENUE FUND COURT							
	9 SPECIAL REV FUND	38,500	38,500	39,375	(875)	-2%	
CAPITAL ASSET REPLACEMENT							
	10 ASSET REPLACEMENT EXPENSES	10,000	23,399	17,735	(7,735)	-77%	
IMPACT FEE FUNDS							
	11 TOTAL IMPACT FEES	608,000	47,639	25,461	582,539	96%	
SPECIAL REVENUE FUND PD							
	16 VEHICLE IMPOUND EXPEND	40,000	40,000	54,038	(14,038)	-35%	
LIGHTING IMPROVEMENT DISTRICTS							
	40 CVSLID	4,000	3,759	4,178	(178)	-4%	
TOTAL EXPENDITURES		24,926,400	13,767,845	12,545,815	12,380,585	50%	



Fiscal Year 2015-2016 Final Budget Adjustments

Finance Department

August 9, 2016

General Fund Budget Summary

Adopted Budget FY 15-16		\$8,051,501
Original Estimate @ 6/30/16		\$7,494,060
Final Estimate @ 6/30/16		\$7,465,286
Total Under Budget		\$586,215

12 Departments were under budget
9 Departments were over budget

Department	Original Budget	Final Estimate @ 6/30/16	Amount Over Budget	Information
Town Clerk	\$197,600	\$216,159	\$18,559	Personnel Costs due to retirement in Clerks Office
Town Manager	\$392,500	\$397,008	\$4,508	Health Insurance and Town Hall Flag Pole
Finance Department	\$329,200	\$333,861	\$4,661	Health Insurance and additional Caselle Software Fee
Recreation	\$63,800	\$68,232	\$4,432	Additional Personnel Hours
Library	\$309,599	\$311,125	\$1,526	Health Insurance and State Retirement
Senior Center	\$242,400	\$242,981	\$581	Food Costs

Department	Original Budget	Final Estimate @ 6/30/16	Amount Over Budget	Information
Parks Maintenance	\$333,200	\$397,619	\$64,419	Parks Maintenance Expenses, Water last fall
Facilities Maintenance	\$345,900	\$361,997	\$16,097	Electricity, Telephone and Janitorial Supplies
Engineering	\$122,000	\$147,015	\$25,015	Position Change
Total General Fund			\$139,798	

Department	Amount Over Budget	Budget Adjustment
Town Clerk	\$18,559	\$20,000
Town Manager	\$4,508	\$7,500
Finance Department	\$4,661	\$7,500
Recreation	\$4,432	\$7,500
Library	\$1,526	\$5,000
Senior Center	\$581	\$5,000
Parks Maintenance	\$64,419	\$75,000
Facilities Maintenance	\$16,097	\$20,000
Engineering	\$25,015	\$30,000
Total General Fund	\$139,798	\$177,500

General Fund Contingency Fund

FY 2015-2016

Total Contingency Fund Budget		\$380,000
Budget Adjustments		\$177,500
Contingency Account Balance		\$202,500